As 2019 draws to a close, I’m sure many of you will be aware of the International Maritime Organization’s World Maritime Day theme for the year ‘Empowering Women in Maritime’. This was a powerful theme that really resonated through the industry with great impact. The topics of gender equality and the contribution of women within the maritime sector dominated many conference programmes across the globe with great positive attention generated. Therefore, it seems only befitting that the Society takes the time to recognise the women within our membership that are making great contributions to, and driving change, in gas-fuelled shipping. These women have been helping their organisations, SGMF and ultimately the industry to make the massive transition away from heavy fuel oils to cleaner gaseous fuels ahead of IMO 2020 and beyond.

In this special feature, we refer to these women as WiGS (Women in Gas-fuelled Shipping). Their backgrounds vary from mathematics to marketing and from chemistry to ex-Commander of the US Coast Guard. Some of these women may be familiar to you – perhaps you have seen them out and about in the industry or presenting at member events. Some may have been working away in the background, away from the spotlight of public presentations, but playing an equally instrumental role in the development of this rapidly growing industry. All of these women are fantastic role models who demonstrate that it is possible, with the right attitude, hard work and support, to succeed in an industry that, although works hard to improve gender diversity, remains to be very male dominated.

As a HR professional, I believe that initiatives to empower women in this industry are very important. But critical to ensuring success is to encourage women to be more visible to their colleagues, business partners, and the next generation of women entering maritime. The next generation needs to see examples of women’s success in our industry, especially if we want to communicate to them that maritime is an industry that is open-minded and forward thinking, in order to compete with other industries when attracting, recruiting and retaining the best talent.

I hope you enjoy reading about these fantastic WiGS!

Krishna Ruparelia
HR & Operations Manager – SGMF  December 2019
Dr Alexandra Ebbinghaus
Maritime Strategic Project Lead – Shell

What role do you play in the gas-fuelled shipping sector?
I work in the Shell Shipping strategy team and my focus is on environmental performance. I am the shipping subject matter expert on air emissions from shipping and represent Shell at several external forums, including the SGMF Environmental Committee.

LNG is a very clean burning fuel and it is important that its advantages are fairly and clearly presented. My main role is to develop pathways for how shipping can reduce its environmental impact, particularly regarding GHG emissions as this is where LNG can make a material contribution. However, this requires developing a close relationship with internal and external stakeholders.

Please describe your role in your organisation and what do you enjoy most about it?
My role in the Shell Shipping Strategy team is to mainly think about the future and to ask the question: how can shipping be decarbonised? From a technical point of view a lot of options can be considered to achieve this. Clearly ship owners would prefer a drop-in fuel, to the same fuel which is in use now, but without the carbon. However, is this really a feasible option since the fuel may be comparatively expensive?

I am fascinated with considering the solutions space from a technical, political, commercial and economic viewpoint, highlighting opportunities and looking for solutions to issues. It requires some patience as regulatory changes, which are driving changing behaviours, take some time to materialise. However, being part of this change is a real highlight of my job.

How did you arrive at this role? (Was it your intention at a young age to always go into this industry?)
In school my favourite subjects were maths and science and I wanted to do something that had a practical application, that’s why I ended up studying mechanical engineering. I was fascinated by the large range of opportunities. I studied in both Germany and the UK, joining Shell in 1995. My career has spanned a range of different roles including research, marketing and commercial, but all often had a strong fuel element. I never really considered shipping as a sector, but a very interesting job in the shipping strategy team came up when I was looking for a change about six years ago.

I have covered a range of challenging projects in my role, even supporting a UNDP project to address piracy in Somalia, but recently my work has focussed more on the environmental impact of shipping: what are the main impacts? How can they be reduced?

As such, my work involves significant engagement with external stakeholders, and I have been privileged to attend IMO discussions on the reduction of GHG emissions. Shipping fascinates me as a global industry that has such a variety of different segments, technologies and business models.

How have you worked with SGMF concerning the safe and sustainable use of gas as a marine fuel?
I joined the SGMF Environmental Committee when it was formed in 2017 and have since taken on the position of Vice Chair. Shell also hosted the 5th meeting of the EC earlier this year at our offices in London.

How do you feel this sector has embraced the talent and value of women?
There are very few women who choose to become mariners. As a result, onshore positions which benefit from maritime experience, such as superintendents and ship managers, are usually male dominated. For other technical roles I do not think that shipping is any different than other sectors, men tend to dominate, though the numbers of women are slowly increasing.

Personally, I cannot say that I have been treated any differently because of my gender. Although, when you are the only woman in a meeting people tend to remember your name.

What excites you or interests you most about this industry and how does this motivate you?
The shipping industry is so very diverse. For example, I never knew that there are specialised vessels transporting orange juice or live fish. It is a truly global business, with a wide range of business models and solutions that, while they work for shipping, would not necessarily work for another industry.

There is always something new to learn about how shipping operates and what is important for other shipping segments and related industries. Shipping is a conservative industry but on the other hand it is one that has signed up to challenging ambitions to reduce GHG emissions. This will require shipping to embrace change – something that does not come naturally to most, but may be even more difficult to an industry where assets are long lived. I am motivated by doing my bit in making this change happen.

Please share something personal about yourself.
It is very difficult to predict what job or placement really works out. I got the job I always thought I wanted but then after a few years I started to get itchy feet and began to look around for something different. Doing research is fascinating but I wanted to explore the business side more, so did another two year post-graduate degree in my spare time. It took me several years to complete, but this business degree opened the doors to new opportunities, not because of having a second degree but due to the fact that I was doing it that gave me the edge when applying for a commercial role.
Alisa L. Praskovich
Manager, Business Development – Crowley LNG

What role do you play in the gas-fuelled shipping sector?
I lead Crowley LNG’s efforts to secure marine bunkering contracts with dual-fuel vessel operators across North America and the Caribbean. I provide detailed proposals to potential customers for LNG marine bunkering solutions using Truck to Ship, Shore to Ship and Ship to Ship operations. Combining my LNG technical, regulatory and commercial knowledge, I ensure our LNG bunkering solutions provide safe, reliable options to our potential customers.

Please describe your role in your organisation and what do you enjoy most about it?
Crowley fully supports the adoption of LNG as a marine fuel to meet current and future IMO regulations. We operate the world’s first dual-fuel container/roll on-roll off container (ConRo) vessels that serve Puerto Rico on a weekly basis.

Crowley has ambitious goals to expand its current LNG business, of which marine bunkering is one important aspect. In my role, I focus on understanding bunker market demand, emerging needs and work closely with our in-house naval architecture firm, Jensen Maritime, to put forward viable solutions for the market.

Being a part of a new venture for Crowley, I truly enjoy the challenge of understanding an emerging market, and how Crowley can play an important role in maturing that market here in the United States and Caribbean regions. The most enjoyable aspect of my current role is meeting dedicated, hardworking people across the entire LNG value chain, and forging both strong partnerships and friendships along the way. This includes my role on the SGMF Technical Committee and working together to keep our industry safe and share Crowley’s best practices.

How did you arrive at this role? (Was it your intention at a young age to always go into this industry?)
In 2016, I retired as a Commander in the U.S. Coast Guard where I spent the past four years of my career deeply engaged in the approval process of several small-scale LNG projects based out of Jacksonville, FL., including the Crowley ConRo vessels. Upon retiring from the Coast Guard, I secured a safety position with Crowley’s Petroleum Services. Within the first year of my new role at Crowley, I was asked to support their efforts to grow its LNG business, specifically in LNG marine markets.

It was always my dream to serve my country and I am profoundly grateful to have served my country honourably for 20 years. I pursued my second career with Crowley based on their commitment to safety and integrity, and more importantly, to their people. My personal mission is to inspire resilience. In my current role, I set out to achieve that goal in the marine transportation industry by promoting and providing more sustainable fuelling solutions.

How have you worked with SGMF concerning the safe and sustainable use of gas as a marine fuel?
I am currently a member of the SGMF Flexible Hose Workgroup, where we are developing guidelines on the use of flexible LNG hoses for marine bunkering. Our work is coming to conclusion, and we hope to publish the new guidelines in early 2020. Crowley has been a member of SGMF since 2018, and just renewed our membership. I hope to continue to serve on various SGMF committees to support our shared goals and share best practices.

How do you feel this sector has embraced the talent and value of women?
Since taking on my new role in LNG business development, I have been very impressed with the commitment by collective efforts of the broader LNG industry groups to promote careers in this industry for women across the globe. Whether through dedicated industry days, or as a dedicated focus at the larger, global LNG events. In addition, SGMF has been a vocal advocate in attracting the talent of women to multiple levels of its staff, committees and work groups, and to the industry writ large. At the end of the day, all companies want to attract and retain high performers, regardless of gender. By stepping up the outreach and educational efforts by all member organisations and companies across the entire LNG value chain, I believe more women will pursue careers in this field.

What excites you or interests you most about this industry and how does this motivate you?
To succeed in my role in securing marine bunkering contracts, establishing collaborative partnerships is key. This is true not only outside of Crowley (e.g. LNG suppliers), but internally as well. As a large and diverse logistics, energy and marine solutions company, it is important to build consensus and momentum across each business unit to achieve the buy in and support needed to stitch together the most effective marine bunkering solutions – whether designing the actual bunker vessels, or putting together the financial models for the “business case” around LNG contracts; it is truly a team effort. Every emerging market has its challenges, and small-scale LNG is no different. Being a part of something new that requires substantial collaboration is what interests me the most.

Please share something personal about yourself.
One of my proudest achievements was being selected to serve as an Ocean Policy Advisor in the White House while assigned as a staffer to the National Ocean Council.

From a very young age I always had a love for and fascination with the ocean and all of its creatures. Throughout my twenty-year military career with the U.S. Coast Guard, every key mission I was a part of traces its roots back to protecting those on the sea or protecting the sea itself, as former Commandant Admiral Papp once said. To be able to achieve a role where I collaborated with Federal, Tribal, State and local governments to just focus on sound marine policy was the highlight of my career.

Now that I am in my second career, I am able to continue to promote strategies aimed at improving both human and ocean health. I am keenly aware that LNG is not a perfect fuel, nor is it carbon neutral. However, it is cleaner than the current alternative of heavy fuel oils and presents a viable bridge until such time other carbon neutral alternatives become practical solutions for the global fleet.

My point is this. First, find what you are passionate about. Second, find a career that allows you to do what you love, and that also meets your own values and ethical standards (never compromise yourself!).
Andrea Gay  
General Manager, Gas – Keppel Offshore and Marine

**What role do you play in the gas-fuelled shipping sector?**
I am responsible for the business development of the entire gas value chain at Keppel Offshore & Marine. I also act as a management advisor to FueLNG – Keppel’s LNG bunkering joint venture with our good partners Shell. FueLNG is one of two companies licensed for LNG bunkering in Singapore.

**Please describe your role in your organisation and what do you enjoy most about it?**
At Keppel we have a deep culture of innovation and constantly push the boundaries across the supply chain – from the development of LNG bunkering and LNG-fuelled vessels downstream to Floating Liquefaction vessels (FLNGV) upstream. For example, we delivered the world’s first converted FLNGV to Golar, Hilli Episeyo, which is currently performing very well in Cameroon and helping to bring down the cost of LNG molecules.

I was privileged to have the opportunity to work with the entire Singapore eco-system to establish the LNG bunkering supply chain, with Keppel being the first to provide commercial LNG bunkering and being the first to construct LNG-powered vessels in Singapore.

We are also building the first LNG bunker vessel in Singapore, the world’s largest bunkering port. Additionally, we are building for downstream demand, including two LNG powered containerships in the US, for the Jones Act market.

I am glad to be part of an organisation that is committed to sustainability and making a tangible difference to the environment and climate change. Within the industry, it is especially heartening to see that conversations within the community are rapidly moving towards carbon reduction and decarbonisation.

**How did you arrive at this role? (Was it your intention at a young age to always go into this industry?)**
I worked in corporate strategy prior to my current role, where we had been and been monitoring the development of gas and LNG in its very early days.

When the opportunity arose, I was very excited to be able to influence the supply chain in the early days of commercialisation, to adopt LNG and grow the industry to what it is today.

**How have you worked with SGMF concerning the safe and sustainable use of gas as a marine fuel?**
SGMF brought the entire community together very early on – regulators, engineering companies, shipyards, manufacturers and shipowners. Through SGMF’s early work, we were able to bring standardisation together, push boundaries and educate the wider eco-system very quickly. It is establishment of safety standards that allows for development within the industry to take place much faster than it would have otherwise.

**How do you feel this sector has embraced the talent and value of women?**
Undoubtedly, this industry has traditionally been a male-dominated industry. However, rapid structural changes in the industry has shifted mindsets very swiftly in what has been in the great majority an oil-fuelled market. Against the backdrop of these rapid changes, the industry has been accepting of new ideas and new entrants, including from women.

In Keppel, I have been very fortunate to be part of an inclusive organisation and have supportive mentors. I am also thankful to the guidance of several key industry veterans.

**What excites you or interests you most about this industry and how does this motivate you?**
We are standing at the cusp of change that can make a huge difference to climate change in the industry. It is up to us to influence consumptions and make a difference.

**Please share something personal about yourself.**
I’m a non-engineer in a male-dominated and technical industry. I’m also a mother of two pre-teenage children who I have to juggle around hectic travelling schedules. I have been in this industry for the past four years and I definitely don’t fit in the traditional mould of someone working in the shipping / LNG / shipyard industry. My advice to anyone working in the industry or wanting to join the industry is not to have any preconceptions of the industry or the people and don’t let anyone box you in. Once you do that, there are a lot more opportunities to make a difference than you can imagine.

www.sgmf.info
What role do you play in the gas-fuelled shipping sector?
I work for DNVGL as a safety engineer in the oil and gas sector. As part of my role I have carried out work on LNG bunkering.

Please describe your role in your organisation and what do you enjoy most about it?
I am a safety engineer. Therefore, I spend about half of my time developing models and computer packages to predict the fire, explosion and toxic risks following an accidental release of fuel. The remainder of my time is spent as a consultant, using these models/packages to make predictions for clients. The more theoretical modelling work is very interesting and can be quite challenging. The contact with customers through the consultancy work helps me to focus on what aspects of the work are of practical interest to operators, and this sometimes stops me getting obsessed with minor technical details which don’t really affect the conclusions.

How did you arrive at this role? (Was it your intention at a young age to always go into this industry?)
As a child, I didn’t have any idea what I wanted to do when I “grew up”. I read maths at university, mainly because the subject fascinated me, rather than for any long-term career plans. While I was studying, I moved further away from pure maths towards the more applied areas such as fluid mechanics. When I finished my degrees, I had little idea what I wanted to do as a career, but I knew that I wanted to be doing a technical job using at least a little bit of the maths that I had learned. I think I really drifted into safety engineering through the mathematical modelling of dispersion and fires, but once I was there, I enjoyed the work and have stayed for more than twenty-five years.

How have you worked with SGMF concerning the safe and sustainable use of gas as a marine fuel?
I carried out a project to predict the size of the flammable cloud if there is an accidental release of LNG while a ship is being refuelled. The project investigated how the size of the flammable cloud depends on factors such as the size of the hose and the transfer rate of LNG. The work was used to help define the safety zones for bunkering operations published by SGMF in the BASiL tool.

How do you feel this sector has embraced the talent and value of women?
I work in a team of about fifty people, almost half of whom are women, and which is managed by a woman. Over the twenty-five years that I have worked in the industry, there has always been a reasonable number of women in the team but over the last ten years there has definitely been an increase in the number of women in management roles and managing technical projects. I have always worked full time, but I think the increasing adoption of flexible working patterns will allow the sector to retain experienced women engineers. However, on an utterly trivial note, it would be good if it was easier to find overalls and safety boots to fit me!

What excites you or interests you most about this industry and how does this motivate you?
It’s always interesting to be working on developing industries, and it is especially rewarding to be supporting an industry which is green and has the potential to reduce emissions of greenhouse gases. It is interesting to be working for an industry trying to operate safely from the start, rather than one which is trying to improve safety after accidents have already occurred. To have been involved, albeit in a very small way, in reducing the risks of a serious accident during LNG bunkering, is certainly something that encourages me.
What role do you play in the gas-fuelled shipping sector?
WinGD are engine designers and are currently the market leader in LNG-fuelled engines for deep-sea vessels. We have been designing engines since the late 1800s. Our history has witnessed great change and progress within the industry.

The changes facing our industry today are unprecedented; it is such an exciting and important time to be a part of this industry. As engine designers our responsibility is to ensure that the engine technology is ready to continue to power ships, regardless of which fuel type will be available ten, twenty or thirty years from now. In order to ensure that the technology is ready, we must prepare now.

Our technology has optimised LNG as fuel, providing the vital and necessary reduction of NOx, SOx and particulate matter. Our next challenge is to reduce CO2 emissions. With upcoming advances to our X-DF engine technology we are achieving that reduction but in order to realize the 2050 target, we must find viable, non-fossil based fuels for the future. LNG is the bridge that will get us there and we believe that it will play a vital role in reaching the 2050 CO2 reduction target.

Please describe your role in your organisation and what do you enjoy most about it?
As the Global Head of Communications, I get to impact a great deal within WinGD. My role began with a focus on marketing, to strengthen our external communications about our products and services. However, in order to be effective with an external audience, the message needs to resonate and be authentic with our internal audience. The promises we make to our external customers need to be the same promises we make to each other, our internal customers.

With that in mind, through my role, I also have the privilege and responsibility to shape WinGD’s internal culture. This is what I am most energised by – building and fostering a culture of growth, trust and reliability which then translates to stronger connections with our customers.

Having a leadership role is a great responsibility and I make a daily effort to ensure that those around me feel valued and empowered. It is when we recognise and appreciate each other’s value that we are able to bring our very best self into our work.

Learning about our engines from a team of brilliant and inspired engineers is both empowering and humbling. I am challenged to learn and grow personally every day. It is such an exciting time to be a part of this industry – I am immensely proud of the role we are playing in leading the shift to sustainability in shipping.

How did you arrive at this role? (Was it your intention at a young age to always go into this industry?)
My journey to this role was far from planned but often our best opportunities are the ones which take us by surprise. For the decade before starting my role at WinGD, I was working in the non-profit sector working to improve the lives of people living with disabilities and serious medical conditions.

Finding myself in a career in shipping seems like a dramatic departure from the charitable sector but at the end of the day similarities do exist. Within every business there is a need to make connections and to make a difference; to influence positive change. At the heart of this is communications. Understanding each other’s needs and perspectives and identifying what you can deliver to meet those needs and to empower sustainable change.

My passion is in making connections. Connections with my colleagues, connections with our customers and connections within the big picture of our role on this planet. Today, more than
ever, working together is key. The challenge facing all of us is our impact on the climate – in this challenge we are all united. It is through collaboration that we will find our greatest effectiveness and our strength to power change.

**How have you worked with SGMF concerning the safe and sustainable use of gas as a marine fuel?**

The work that SGMF is doing for the safe and responsible use of LNG as a marine fuel is very important. Right now, the industry is facing myriad options, all promising to be THE green solution of the future. The trouble is that none of these options have the infrastructure or scalability to be a true solution. This has led to a division of focus and resources causing increased uncertainty. Where there is increased uncertainty there is a lack of decision making which results in a lack of progress.

In order to succeed in meeting the 2050 CO2 reduction targets, resources and efforts need to come together so that our very best expertise is focused on a real solution. LNG provides the clean fuel we need now to make significant progress in reducing emissions. With this progress we can take the next steps needed to make significant changes to the industry.

**How do you feel this sector has embraced the talent and value of women?**

In my experience, women have a strength in building community through collaboration. The targets we must reach as an industry will only be achieved through collaboration; through the pooling of our best ideas and resources towards achieving this common goal. By leaving egos at the door, we will set aside personal gain in order to attain a common good. These are natural traits that women bring to the conversation. There is so much at stake here and the inherent leadership skills of women are perfectly suited to bring together our very best solutions.

By focusing on the common goal that unites us and by forging real connections, we will succeed.

**What excites you or interests you most about this industry and how does this motivate you?**

Today’s climate crisis is the most important issue we face. The role that shipping plays in the global economy means that our industry's ability to respond will have game-changing impact. I am both humbled and proud of the responsibility we hold. We are writing the history of our industry and our planet. The decisions we make today will be remembered, for good or for bad, for generations to come. Our efforts today are making a significant difference.

With as significant an influence in globalisation, if the shipping world unites to make a change, its impact will be profound. That is the part which makes it so exhilarating and so daunting to be a part of this change. We have the capacity to truly make a difference. It will only be successful if we all unite on this cause. The will must be driven by us all.

**Please share something personal about yourself.**

I have embraced change in my life which has been both rewarding and challenging. In 2016, my family relocated from Canada to Switzerland with little more than curiosity for what a new life would offer. We have learned that it is by embracing change, rather than fighting it, that we can find our very best selves and our very best life. Leaning in towards things that are daunting, unknown and scary is where you will find the greatest exhilaration and success. This is something that, for me, is true in both my professional and personal life. We can be a force that empowers positive change – and by coming together, our impact will be immense.
What role do you play in the gas-fuelled shipping sector?
I have been an ambassador for the use of gas as a marine fuel since 2014. I organise, support, attend and market important industry gatherings and initiatives related to this topic.

Please describe your role in your organisation and what do you enjoy most about it?
I am in a marketing role but like to think of myself as an ambassador for gas as a marine fuel. I really enjoy speaking to both the converted and the non-converted as we can learn a lot from the people who don’t necessarily agree with our views.

How did you arrive at this role? (Was it your intention at a young age to always go into this industry?)
Almost by chance! With my journalism / communications background I was working in the marine media industry and was approached by a client while I was in that role. So no, it was not my intention at a young age to come into this industry, but I have enjoyed it and do believe I have a lot to contribute.

How have you worked with SGMF concerning the safe and sustainable use of gas as a marine fuel?
I have worked with SGMF in a variety of ways for a number of years including at industry gatherings, providing advice on content and material and supporting my colleagues who are in SGMF Technical and Environmental Committees and Work Groups.

How do you feel this sector has embraced the talent and value of women?
In general, the number of women in this industry is still very limited and there is a high representation in the marketing / communications fields. There are, however, more and more women in the technical field, which is encouraging. I believe women are welcomed in this sector and their perspectives are respected.

What excites you or interests you most about this industry and how does this motivate you?
The prospect that we can make a real difference to emissions reduction in the shipping industry and have a positive impact on the environment. We only have one home!

Please share something personal about yourself.
When I first started getting involved in this sector, we were always hearing about this ‘chicken & egg’ dilemma, and that was frustrating for all of us who believed in it and wanted to see it move forward. These days, however, it’s really heartening to see how far we’ve come – every time I read or hear about a new development in the infrastructure (which has always been a challenge) it gives me hope that we’re heading in the right direction.

For me personally it’s also great to see that LNG, which is still a fossil fuel and therefore not carbon-free, is paving the way for options such as biogas in the future. As someone who loves the great outdoors – I don’t take our environment for granted and would be very proud to see shipping make its contribution in protecting the one home we all have and share.
What role do you play in the gas-fuelled shipping sector?
Currently I have a split role. I focus on the sales side for LNG Bunkering (Cargo Handling) and bioLNG production facilities, and I also focus on marketing, promoting our complete solutions for the full Gas Value Chain.

Before I joined Wärtsilä, I was responsible for the business development of flowmeters for the marine industry. This is how I first started to look into LNG Bunkering.

Please describe your role in your organisation and what do you enjoy most about it?
I like the diversity of my tasks, due to the combination of marketing and sales in my role. When it comes to bioLNG, this is a new area for the marine sector and being in the frontline, educating our customers on this potential new fuel is something that gives me a lot of energy and motivation. Combined with my already established network and knowledge on LNG bunkering, it makes my job very lively and interesting.

The fact that I can do this within Wärtsilä, is an additional plus. Working for a large company has a lot of benefits; you can utilise an extensive network of experts, just around the corner. With the diverse solutions that Wärtsilä offers, as an employee you can move in all directions and still stay within the same company.

How did you arrive at this role? (Was it your intention at a young age to always go into this industry?)
I am a chemical engineer and therefore, an interest in LNG has always been in my veins. However, the move into the maritime industry happened by coincidence. After doing the same job for many years, I needed a new challenge. Therefore, when a job in the maritime industry was offered to me, I took it with both hands.

This industry touched me from day one and now that I can combine my educational background with my passion for the maritime industry, it all comes together.

How have you worked with SGMF concerning the safe and sustainable use of gas as a marine fuel?
Some years ago, at the beginning of SGMF, I was participating in the Quantity and Quality Measurements of LNG workgroup, due to my gas analysis and flowmeter knowledge. Working with SGMF has always been a pleasure and after being out of the picture for a while, it is good to be back. The maritime industry needs parties like SGMF to help and guide them adapting to the new world and new fuels.

How do you feel this sector has embraced the talent and value of women?
With extensive experience in non-maritime industries, I can fairly say that I have never felt so welcomed as I have been in this sector. Most people in the maritime industry have an open mind and they judge you on your knowledge and not on your gender. In my experience this was totally different in, for example, the chemical industry.

Additionally, I believe that the women working in this sector have the same mentality as the men; we think in possibilities instead problems. Just put your shoulders underneath and get it done.

What excites you or interests you most about this industry and how does this motivate you?
The passion and the drive of people you meet, the love they feel for the maritime industry and specifically when it comes to the gas related part of this industry; the mentality to take a risk and try something new. As an industry we need to evolve and keep innovating. That mindset makes this one of the best sectors to work for.

Please share something personal about yourself.
I don’t have a maritime educational background and I have never been at sea (besides some vessel visits in port) but I was welcomed with open arms into this sector. When you want to learn, share experiences and are not afraid to fall and get up again, the gas fuelled vessels industry is the best place to be; for both men and women.
What role do you play in the gas-fuelled shipping sector?
I am head of the HSEQ and technical department within Total Marine Fuels Global Solutions, the entity within Total Group in charge of the marine bunkering business (conventional and LNG).

One of the main obstacles people probably see in adopting LNG as a marine fuel is the technical hurdles. My team accompanies potential clients in their transition to cleaner fuels, by providing the technical know-how to help them to find LNG solutions that fit their specific needs.

Please describe your role in your organisation and what do you enjoy most about it?
I particularly like the fact that we need to work with all of the stakeholders involved – the shipbuilder, shipowner, port authorities, regulatory agencies, standards bodies. We are bringing people together to find safe and cost-effective technical solutions to bringing clean-burning fuel to the shipping industry and of course cleaner air to port communities.

How did you arrive at this role? (Was it your intention at a young age to always go into this industry?)
My education was in chemistry and mineral economics, but for most of my seventeen years with the Total Group I have worked on major LNG projects, including in technical roles. Therefore, I am helping to bring expertise and best-practice from Total’s deep LNG experience to marine bunkering.

It was a steep learning-curve getting up to speed with the business of shipping, but this has been an exciting challenge and I’ve been very pleased to be part this team at such an exciting time, with the IMO Global Sulphur Cap approaching in 2020 and the industry going through such a major transition.

I grew up mostly in Venezuela, and although it obviously has a large oil and gas industry, I can’t say I ever imagined being in this industry when I was young.

How have you worked with SGMF concerning the safe and sustainable use of gas as a marine fuel?
The wider LNG industry has an excellent safety record and we feel that by working closely with industry partners we can ensure that this safety record continues in the marine bunkering business. This means collaborating on safety standards, interfaces, education, etc. We see SGMF as being an excellent vehicle to help achieve these goals. My team regularly contributes to the technical work of SGMF and I’m honoured to represent Total on the SGMF board of directors.

How do you feel this sector has embraced the talent and value of women?
There’s no denying that both the oil and gas industry and the shipping industry have traditionally been male worlds – like plenty of others. Slowly this is changing, particularly with a younger generation of leaders rising up through the ranks. This means more acceptance of women in the space, and a better ability to listen to women, and value their contributions.

Initiatives like this are important simply for the purpose of raising awareness. On the one hand, for women starting out – to assure them they have a place in this industry. But also, for men, who perhaps simply never gave a thought to what it could feel like to be a woman coming into a male-dominated workforce. Or never imagined that, as a woman, one often has to fight much harder to get one’s voice heard.

So, I believe that WiGs is a great initiative.

What excites you or interests you most about this industry and how does this motivate you?
Being part of a transition to a cleaner environment is certainly a motivation. This is an exciting time for the industry and a critical time for our planet. In this role, I feel like I am contributing in some small way to positive change.

But also, shipping is just a fascinating world and I’ve certainly enjoyed meeting and learning from the shipping experts I have met on the SGMF board.

Please share something personal about yourself.
I grew up in Venezuela and given the troubles that have plagued the country in recent decades, I would have had limited opportunities had I stayed. But I was a hard worker in school, and I was determined. Through a mixture of good luck and hard work I eventually was able to go on to university studies in Germany, France and the United States and eventually to work for Total Group in Paris. In this role I have had a fascinating career that has taken me around the world and allowed me to grow tremendously.

There have been plenty of challenges along the way, and in each case it’s all about believing in yourself, about remaining positive, and marching forward one step at a time. The other thing I would like to tell future generations is to be yourself. When I was growing up, often times the message we heard as girls was that we needed to behave like men to be accepted and competitive in the workplace. And this is the wrong message. Women are then competing with a clear disadvantage, and that’s the mentality that needs to be changed.

It’s actually a great thing to be a woman in the workplace. In addition to competences, it brings balance and more effective teams. It also brings new ways of approaching problems. It enriches the workplace. That’s the richness of diversity.
What role do you play in the gas-fuelled shipping sector?
I am in charge of establishing the supervision of the security for bunkering activities and the licensing process for bunker vessel operators.

Please describe your role in your organisation and what do you enjoy most about it?
My job is to transpose international and national regulations into port activity.

New issues and problems related to ship LNG bunkering activity in port areas are particularly stimulating because we are working on state-of-the-art technology and a very high level of risk management.

How did you arrive at this role? (Was it your intention at a young age to always go into this industry?)
The sea and working on ships were my dreams of youth. The first part of my career is maritime, I sailed for almost fifteen years as an officer for a French ferry company. Then, I chose to return ashore as Cherbourg Harbour Master for seven years before joining the Port of Marseille, as I wanted to join France’s biggest port.

How have you worked with SGMF concerning the safe and sustainable use of gas as a marine fuel?
It became clear to me very early that I needed to join SGMF to meet professionals and specialists, to share our thoughts and promote a safe use of LNG as a marine fuel.

I have also been involved in Work Group 10 which has been looking at shipyard work practices for dry docking of gas-fuelled ships. The output from this group (due early 2020) will provide a wide-ranging guide for ship owners and ship/repair yards as to how to safely maintain gas fuelled-vessels.

How do you feel this sector has embraced the talent and value of women?
To be honest, women are not very numerous in the maritime sector and it is necessary to prove oneself, but as soon as you confirm your skills, the welcome given to you is very stimulating and a real attention is given to your personal contribution.

Our approach to problems is different, it can be more direct and pragmatic, playing the candid role often allows to evolve the reflexion and enrich each other.

What excites you or interests you most about this industry and how does this motivate you?
Advanced technology and the level of knowledge and rigor required.

Please share something personal about yourself.
Curiosity, requirement towards oneself and personal investment are sources of great satisfactions because they lead you to discovery and excellence, and are a nice challenge!
What role do you play in the gas-fuelled shipping sector?
I work in the Marine Fuel Development and Promotion (MDP) department in the Maritime and Port Authority of Singapore (MPA). I drive and push developments in the LNG bunkering space, such as promoting the use of LNG as a marine fuel. With increasing awareness of climate change, this is an important step towards reducing the environmental footprint of the shipping industry as a global economic engine.

Please describe your role in your organisation and what do you enjoy most about it?
It has not been easy to convince shipping companies to convert their vessels to take LNG as a fuel or to build LNG-fuelled ships. This is despite LNG being a technically proven marine fuel solution, which has been adopted for close to twenty years, and is the most mature, scalable and commercially viable alternative fuel available for the maritime industry. Hence at MPA, we are continuously reaching out to international shipping companies to promote the economic and environment benefits by using LNG as a marine fuel.

In one of my earlier roles, I was working under the International Maritime Centre division where I worked closely with international shipping companies to set up operations in Singapore and helped them grow their presence in Singapore and in Asia. It was a very fulfilling role and now, I can continue to promote Singapore as a choice location for businesses and an ideal location for LNG bunkering operations to take place.

I enjoy meeting people across the industry - meeting new people means learning new things! It helps a lot in my personal and professional development. MPA, as an organisation, offers different opportunities for its officers, from operational and technical field of works to promotion and development roles.

How did you arrive at this role? (Was it your intention at a young age to always go into this industry?)
Unlike the heyday of the 80's and 90's, the maritime sector today is not the obvious career choice for many Singaporeans. I believe this is due to the lack of awareness of the opportunities available within the industry - it is really more than just about seafaring!

One and a half years in, I signed up for a Masters programme in Maritime Studies, which was partially sponsored by MPA. I would say that this was a turning point in my career as it helped me to gain a deeper appreciation of my work and its role in bringing about trade – shipping is the backbone of international trade. Since then, I have not looked back at my choice in joining MPA.

How have you worked with SGMF concerning the safe and sustainable use of gas as a marine fuel?
We appreciate the assistance of SGMF in the development of the series of standards on LNG bunkering and for their permission to reproduce and adapt the guidelines such as LNG bunkering safety guidelines, Training and Competency guidelines and Quality and Quantity Contractual guidelines in Singapore’s Technical Reference 56 documentation.

As Singapore builds up its experience and expertise in LNG bunkering operations, I see potential in closer cooperation with the SGMF to set standards and develop industry tools to support the bunkering industry. MPA, in collaboration with the Institutes of Higher Learning, are also constantly researching on “future fuels” as we strive towards the IMO 2050 goal. I believe that MPA can play a part in SGMF’s roadmap for gas as a marine fuel.

How do you feel this sector has embraced the talent and value of women?
My Chief Executive is a woman! We have seen many capable women profiled in this sector, be it seafarers or white-collar professionals. IMO has given a lot of focus on empowering women in the maritime community, make it the 2019 World Maritime Day theme. The maritime industry gives women fair opportunities to profile themselves and contribute. I do not see it as a competition between the two genders in the maritime industry. In fact, they complement each other, which has helped us grow and develop the sector to where we are today!

What excites you or interests you most about this industry and how does this motivate you?
Diversity! You never get bored being in the industry and you are constantly learning new things! While there are issues and challenges facing the industry, they set us to think how we should structure ourselves to operate more effectively and efficiently. The maritime industry is a strongly knit industry, with strong resilience and passionate individuals who are able motivate each of us to strive for our industry.

Please share something personal about yourself.
The maritime sector is no doubt a challenging industry with a steep learning curve. However, do not be afraid to take your first step into this industry. You might be surprised how rewarding this career can be as you dive into the sea of opportunities.
Karen Higgins  
Marine Project Engineer/USCG Licensed Chief Engineer – Shell

What role do you play in the gas-fuelled shipping sector?  
I work within a Shipping and Maritime project team supporting LNG fuel projects in the Americas for Shell Trading (US) Company.

Please describe your role in your organisation and what do you enjoy most about it?  
By working directly with a network of partners and stakeholders in the ports where we plan to conduct LNG bunkering operations, I ensure that understanding of LNG and how Shell intends to operate is achieved. We also collaborate with them to assure there are plans for safe LNG bunkering operations.

I have enjoyed building a relationship with the U.S. Coast Guard. My work with them includes regular communication and interaction in order to stay attuned to new policies or notices regarding LNG as marine fuel and LNG Bunkering, and it has also allowed me to keep them current with our progress in the ports.

I also work closely with Shell's contracted LNG bunkering operator and our customers to keep everyone aligned and on target for effective and safe operations.

Managing relationships with a diverse group of stakeholders in the different ports was initially outside my comfort zone because it was a “soft-skill” I hadn't fully developed. Much to my surprise, it is an aspect that I enjoy. I have met many different people from various organizations and industry groups, and I work with them to spread a consistent message of the benefits of LNG as a marine fuel and help to explain how to safely transport, transfer, and utilise LNG.

How did you arrive at this role? (Was it your intention at a young age to always go into this industry?)  
If you had asked me ten years ago if I would work for a big oil major on an LNG project, I probably would have looked at you like you were crazy. I knew when I was a teenager that I would work in the maritime industry and believed I would probably be sailing much of my career.

In fact, this is career number two for me. Before working for Shell Trading (US) Company, I spent much of my time at sea working on various types and sizes of vessels as a licensed engineering officer. I began my sea-going career on Casino boats in Kansas City, Missouri as an assistant engineer and finished my career after sailing for about 3.5 years as Chief Engineer on product tankers. There were many different types of vessels in between, but no LNG.

I began my shore-side career with Shell Trading (US) Company in 2012. Since joining, I have worked in several different roles – all of which have helped me to embrace my new career on land.

I was excited to learn about the LNG projects our Shipping and Maritime Projects team were working on and was happy to join the team when opportunity presented itself. It’s fun and challenging to be a part of something that is making its debut in the shipping industry. And I look forward to being a part of the “firsts” that will come with our project.

How have you worked with SGMF concerning the safe and sustainable use of gas as a marine fuel?  
I was introduced to SGMF as part of my training as I came into this project role. Since then, I have used the materials SGMF has produced in the work I do daily and have also passed the information on to stakeholders to help them understand what it is that is going on around LNG as a marine fuel and more specifically LNG bunkering.

I have also participated in one of the hose transfer work group meetings as an observer/participant and I used the BASIL tool not long after its release to do some preliminary studies between our bunkering vessel and a customer vessel in a potential port location. The results of that study have helped me to move forward on pursuing the work needed to build understanding and stakeholder consensus to conduct an LNG bunkering in that port.

How do you feel this sector has embraced the talent and value of women?  
I have met some dynamic women over the past couple of years who are directly involved with different aspects of this industry including U.S Coast Guard (regulatory), LNG bunkering projects, LNG as a marine fuel projects, LNG bunkering vessel officers, LNG providers and suppliers, commercial sales and operation and technical sales and operation.

I am proud to say Shell has been at the forefront of this diversity and inclusion as we have quite a few women in our teams locally and internationally who work in the LNG sector. In fact, my project team at Shell was started by one remarkable woman who is now our General Manager of Shipping and Maritime in the Americas.
I believe there has been growth in women in the sector over the past few years. However, I believe there continues to be room for improvement.

When I started in this role, I went to industry conferences and training sessions to learn and to network and found that many times I was the only woman or one of a few women in the audience. To this day, I don’t recall ever seeing a woman presenting or part of a panel on behalf of LNG as a marine fuel. (This is similar to where I started in the maritime industry and although there has been improvement over the years, there is certainly room to grow).

I wouldn’t say that the sector hasn’t “embraced” the women who are currently involved and newly coming into the industry, but I believe more can be done to encourage women to get involved in the great opportunities this sector has to provide in the coming years. Women have the skills and talents to continue to grow the industry and teach the uninformed. Women offer unique skills that have proven to benefit businesses. By having a more diverse group, better decisions are made, and businesses have seen improved performance. The opportunities are there, and I would love to see more women take them.

What excites you or interests you most about this industry and how does this motivate you?

LNG is clean and “cool”!

Throughout my career, I worked with diesel oil and heavy oils in steam ships and diesel engines. I am all too familiar with the effects of those oils on main engines having completed many air box and cylinder inspections, cleaning discs on purifiers and bunkering the oils. LNG offers a completely different take on all of that from reduced maintenance on engines to no heavy, persistent odours.

I was only lightly aware of LNG prior to the role I am currently in with Shell. I have learned so much more about it and I am excited about the role LNG is playing in marine transport.

I look forward to seeing the US embrace LNG in our major ports specifically regarding getting the LNG fuelled ships bunkered. I look forward to the day an LNG bunker barge pulls up alongside one of those ships and conducts the bunkering operation like traditional oil barges have always done and no one blinking an eye about it.

Please share something personal about yourself.

I grew up in a suburb of Boston, Massachusetts and spent every summer in or on the ocean, in the Harbour or bays on my Dad’s boat. This is where I get my passion for the ocean (and how I think I got salt water in my veins). This is also why I chose the initial career path to sail on ships and why the maritime industry will always be something I am connected to.

When I say I never saw a career that would be involved with LNG coming, I laugh because I think of the times in my life where LNG has “lightly touched” some aspect of it. It’s funny my awareness or lack of awareness of LNG prior to working in this role at Shell Trading (US) Company.

LNG came into Boston Harbour by ship (and stopped all boat traffic while it was in transit to Chelsea – how frustrating it was!). When I was at Maritime School, I worked an internship during a summer where we were helping to recommission an LNG Carrier – I was actually in one of the tanks; (a year later it was decommissioned again due to lack of funds). When I sailed on ships, one of the other engineers I worked with mentioned something about going to work on LNG ships - (he said it was a better job- “yeah ok for you”, I thought!). I spent some time in Norway years ago while engines that were bound for a new build ship, where I would sail as first engineer, were undergoing Factory Acceptance Tests. At the factory, I was introduced to some “secret” engine testing the manufacturer was conducting to see what different kinds of fuels could be used on these combustion engines (LNG was one of the trial fuels). Apparently, LNG touched my life in quite a few areas over time and I paid no attention to it. Who knew how it would come into my life later!

My current role keeps me connected to maritime and it is all about LNG. It’s an exciting place to be right now. I try to keep some of the above in mind when discussing LNG with people who don’t know much about it or the maritime Industry. I also enjoy sharing my experiences with the younger generation to show that we never stop learning, that plans change, and it’s ok if they do because you never know where the path will take you, it could be something exciting and challenging and you can do it!
What role do you play in the gas-fuelled shipping sector?
Previously I was, among other things, Containerships’ project manager for the NB project of four LNG fuelled vessels. The role included technical aspects of shipbuilding, knowledge building inside our organisation and at the shipyard, as well as all administrative coordination and cooperation with different stakeholder required for licencing and actual planned operations. Of course, none of this was achieved alone, but with a very positive team spirit from all involved parties. I think similar learning curves took place for all of them.

Since this project, I have moved on to a new role at Gasum where I work with land-based industrial projects, rather than seafaring.

Please describe your role in your organisation and what do you enjoy most about it?
The role in Containerships was very broad and required a lot of learning and inventing since no one in the project organisation team had done an exactly similar project before. There were a lot of assumptions and operational differences that needed to be discussed at the beginning of the project to get even level of expectations both technically and commercially. At the end it was interesting to see how all puzzle pieces started to fall in place. The ships were delivered, operation with gas was possible from day one and even SIMOPS were granted by the time the ships arrived into Europe.

How did you arrive at this role? (Was it your intention at a young age to always go into this industry?)
Well, small girls were not exactly encouraged to dream of technical roles, let alone seafaring, in my childhood. Having said that, girls were not encouraged, but, on the other hand they were not discouraged actively either. I don’t think the career counsellor at primary school knew about gas shipping and no one ever considered career opportunities out of the ordinary (i.e., teacher, nurse, accountant etc.). It took me a while (years…) to realize I could actually do something completely different, just for the fun of it. Therefore, I have never aimed for this particular field, I was just doing my thing, when one thing lead to another. It took a bit of a longer detour to arrive here, but it wouldn’t have been as interesting to do it in another way. Also, I think it was easier to see the bigger picture of such a complex project when I had a certain level of knowledge in many of the fields involved.

How have you worked with SGMF concerning the safe and sustainable use of gas as a marine fuel?
When Containerships joined SGMF, I participated on the WG10 on dry docking procedures. There should be possibility to dock LNG fuelled vessels in a safe (yet fast) manner with some fuel on the tanks and best practices are easiest developed in a group with other rather than by each shipowner or yard separately.

What excites you or interests you most about this industry and how does this motivate you?
The possibility to be involved in the creation of something new is always interesting. I also have a background in environmental science. Therefore, the possibility to do something practical to promote alternative fuels is a big plus for me. LNG, as it is today, might be still of fossil origin, but there is a hope of biogas production increasing in not so distant future. When it does, the technology and infrastructure to use it in larger scale should be there. And in the meanwhile, LNG provides a partial answer to SOx, NOx and soot issues.

Please share something personal about yourself.
There isn’t anything special I could tell here. Just stay curious and open to possibilities. Free your mind and the rest will follow.
What role do you play in the gas-fuelled shipping sector?
I have been involved in the gas-fuelled shipping sector since 2013. Since then I have worn several “hats”. I worked with the US IMO delegation and USCG committees focusing on the IGF Code and was lucky enough to contribute to the development and delivery of USCG approved Basic and Advanced Low Flash Point Fuel Operations (a.k.a., LNG Bunkering or LNG Marine Fuel) Courses. These training courses were attended by Harvey Gulf and Tote Maritime, both pioneers in the sector in North America. I worked closely with Crowley Maritime in preparation for the arrival of their Commitment Class ConRo ships. These vessels were the first LNG-powered, combination container and Roll-On/Roll-Off (ConRo) ships in the world and were designed especially for service between the US port of Jacksonville and Puerto Rico.

In addition to SGMF, I am also an active member of the SEA LNG Infrastructure Working Group, representing the small-scale LNG/gas fuelled shipping sector on a number of American Association of Port Authorities (AAPA) Committees, including the Public Relations, Environment, Harbors and Navigation, Cruise Ship and Maritime and Economic Development Committees. I am also a member of the AAPA’s Professional Port Manager Program, and plan on receiving my PPM certification in 2021. I’m pretty sure I am the oldest person in the AAPA PPM Class of 2021 by at least a decade!

Please describe your role in your organisation and what do you enjoy most about it?
I am currently working as consultant on the Ferus/Eagle LNG ports team tasked with evaluating the potential LNG demand, LNG infrastructure development opportunities and adoption in several US Ports. My current responsibilities also include liaising with a wide range of port authority personnel, USCG representatives, shipowners and operators and stakeholders.

Being part of a team tasked with the gauging the efficacy of investment in small scale infrastructure here in the US can be challenging but I really enjoy both the discovery part of the work as well as the interaction with the various players that can help make that happen. People often joke that, despite its size, the shipping industry is a very tight knit community. The gas fuelled shipping sector is a microcosm of that! I have met some of my closest friends while working in this “niche within a niche” industry.

How did you arrive at this role? (Was it your intention at a young age to always go into this industry?)
As a graduate of the US Merchant Marine Academy, the maritime industry is something I have been drawn to since the age of eighteen. Most of my career has been spent in the advocacy business starting as Executive Director of the Chemical Carriers’ Association, then working in various roles at entities such as INTERTANKO and the US Maritime Resource Center. In 2013, I saw John Hatley of Wärtsilä give a presentation on “LNG as Fuel” and I was hooked. John is a friend and fellow Kings Pointer so I took advantage of his “wizard” level of knowledge setting out to learn as much as I could regarding LNG as fuel, the IGF Code and IMO 2020 as fast as possible. I was fortunate to be there as an IMO NGO when the MARPOL Annex VI revisions were first proposed. Without these revisions, IMO 2020 would not exist. My IMO and USCG advisory committee experience paid off when I was asked to participate as part of the IMO delegation to the Sub-Committee on Human Element, Training and Watchkeeping focusing on crew training under the IGF Code. From 2013 to 2018 I was charged with leading a USCG Advisory Sub-Committee tasked with developing guidance for the gas fueled ship in the United States. I am firm believer in the importance of the collaborative process that both the IMO and USCG offer our industry. SGMF’s presence as an NGO at IMO is critical to the future of clean shipping. There is plenty of room for LNG as part of the dialog as IMO begins to lay out the 2030, 2040 and 2050 clean shipping targets.

How have you worked with SGMF concerning the safe and sustainable use of gas as a marine fuel?
Early on I was more involved with some of the training guides and few of the technical committees, but I need to get more involved in 2020! I am constantly on the SGMF member section of the website and find the library resources to be indispensable, especially to the many newcomers to LNG as fuel that I interact with on a regular basis. 2020 will be a watershed for meeting the emissions mandates and Port and Flag state authorities will need to hold owners and operators accountable. The good folks at SGMF (both the Secretariat and membership) needs to stay at the forefront of this. People need to stay engaged TODAY to make sure that we take the correct steps to ensure plans are in place so we can make things happen ten, twenty and thirty years from now.

Continued
How do you feel this sector has embraced the talent and value of women?

Because of its expansive swath, the maritime industry has always been slow to evolve in many ways, not just in gender equality. As one of the earlier classes of women to graduate from the US Merchant Marine Academy, I have seen the sentiment towards women change and evolve over time. The fact that the gas fuelled sector is relatively new has benefitted from that evolution. Over the course of my career I have held firm to the belief that if you can do the job, your gender doesn’t matter. My other go to mantra is “Be kind, always”. Kindness and generosity with your time is as important to your career as working hard.

Tim Colton, a legend in the US shipbuilding industry whose maritime blog was a predecessor to the gCaptain website, gave me my first big break in hiring me to work for the Chemical Carriers’ Association (CCA) despite being eight months pregnant with my first child. Tim was one of the smartest people I’ve ever worked with. He demanded excellence every day and didn’t have any issue telling a man or a woman their work was subpar (that’s the G-Rated version). The confidence I gained in working for Tim and CCA was the springboard for my graduate work in Environmental Engineering and subsequently my career in a varied range of technical fields.

I think STEM plays a critical role in women having success in this field. It’s been my experience that some of the most impressive LNG as Fuel Subject Matter Expert or SME’s are women, such as Alisa Praskovich from Crowley, and Marjorie Marino Zoretic at Foss. I am confident that, as the sector matures, more women will emerge as leaders.

As far minimising the gender gap in the shipping industry, I would be remiss to not mention the work of the Women’s International Shipping & Trading Association (WISTA). WISTA is an organisation connecting female executives and decision-makers around the world. WISTA International serves as a connector for its network of more than 3,500 female professionals from all sectors of the maritime industry. WISTA members have access to an incredibly diverse network of executives in the shipping and trading field on whom they can call for referrals, connections, advice or business collaborations. WISTA’s mission is to attract and support women at the management level, in the maritime, trading and logistics sectors.

What excites you or interests you most about this industry and how does this motivate you?

IMO 2020 is the first real step to address the shipping industry’s responsibility to take the lead in stopping climate change and SGMF is the flagships of these efforts. The development of small-scale infrastructure in support of gas fuelled ships will help bridge the gap to 2030, 2040 and 2050. SGMF and SEALNG have been integral to getting the facts out there, in addition to consistently providing authenticated data and analysis based off decades of safe LNG operations. Misunderstandings still exist around LNG as a marine fuel, mostly in terms of its safety and greenhouse gas (GHG) performance. I am excited to be part of the effort to work with infrastructure stakeholders, including ports both here in the US ands worldwide, in developing the best solution for meeting the IMO’s 2030, 2040, and 2050 decarbonisation targets.

I know it sound cliché but I am motivated to leave a better world for my children and their children. Wind, solar battery and other de-carbonisation energies are the key to shipping decoupling from fossil fuels, but I feel that LNG is the cleanest bridge as those technologies evolve on the scale necessary to meet the mandates.

Please share something personal about yourself.

Here are a few things that people may not know about me:

- I am a professional photographer, it’s one of my passions that I hope to really develop further as part of my retirement goals.
- I am President and a founding member of a non-profit called First10Forward (F10F) whose motto is “Women Empowering Women to Become Extraordinary”. F10F is a New Jersey non-profit Corporation whose mission is to advance the professional goals of women pursuing non-traditional careers. The organization is the brain child of a group of women graduates of the United States Merchant Marine Academy (“Kings Point”), who share a sense of gratitude for the life altering, professional and personal opportunities their Kings Point education bestowed upon them, while at the same time sharing an awareness of the challenges they had to overcome to succeed in a traditionally male dominated industry. Our members come together over a desire to pay forward their wisdom and financial backing to girls and women embarking on similar non-traditional journeys.
- I consider my two sons my greatest achievements. They are egalitarian, kind, honest and intelligent young men. They get all the above traits from my husband but their sharp wit and terrific sense of humor are all my DNA.
Marta Ponis
Project Manager New Building & Technical – Stolt Tankers BV

What role do you play in the gas-fuelled shipping sector? I joined the Stolt Tankers New Building and Technical department six years ago. Right from the start, I was given the great opportunity to work on projects dealing with alternative fuels, including LNG. Back then, Stolt-Nielsen already had a vision concerning LNG as a potential business.

That vision enabled Stolt-Nielsen to take the important step of ordering the first two small-scale LNG carriers/bunkering vessels in December 2016. This, for me, was the second major event of that year following the birth of my first daughter Olivia. Two challenging and amazing projects started right then!

How did you arrive at this role? (Was it your intention at a young age to always go into this industry?)

I grew up between Sardinia and Genoa with a true passion for the sea. I dreamt of designing sailing boats and I decided to study Naval Architecture and Marine Engineering.

A few months into my studies I realised that I would not see any fancy sailing boats in my textbooks, only mathematics, physics, mechanical and steel structures. However, I was in love with ships anyway, with cargo ships in particular. I was fascinated by their dimensions and the magic of Archimedes’ principle applying to those huge bodies. I will never forget the emotion when I walked for the first time on a dry dock under the hull of a thirty-year old Ro-Ro vessel.

I started working as a superintendent immediately after my studies, for a family-owned ship management company in Genoa where great professionals taught me about this business and gave me the opportunity to grow.

Following my first ten years of work from technical to safety and management, I was offered a job at Stolt Tankers and I decided to leave Italy and my family. So, I quit my first job and moved to Rotterdam to join the world’s largest operator of sophisticated chemical tankers.

I switched from very old dry cargo ladies to very sophisticated chemical parcel tankers and subsequently to new building LNG carriers!

How have you worked with SGMF concerning the safe and sustainable use of gas as a marine fuel?

The shipping industry is a large but also very small world where successful projects are always achieved by skilled teams. In addition to my amazing colleagues, my team also includes suppliers, designers, shipyards, regulators and technical associations such as SGMF.

Sharing information and working on standardisation are, in my opinion, two indispensable factors required in order to be successful in this conservative business. Both of those factors are embraced by SGMF, who promote safety and industry best practice and encourages training within the industry in the use of gas as a marine fuel and are the basis of our cooperation.

Being part of SGMF working groups is a great way to share experience and team up with other co-travellers in this journey towards a cleaner and safer future.

We are now progressing! The world of shipping is changing.

How do you feel this sector has embraced the talent and value of women?

The shipping industry has started to realise that women are part of the game. There are still too few women in this business compared to men, but our presence is growing, and men are changing the way they interact with us. It’s not so strange anymore to find a woman working on board a ship or delivering a technical speech at a conference.

At the same time, women are becoming more confident: we are less fearful, and we strongly support each other. This gained confidence and mindset will help new generations to have an easier start and to work in a female friendly business environment.

We still have to fight against some stereotypes, but we are definitely going into the right direction!

What excites you or interests you most about this industry and how does this motivate you?

What excites me has changed in recent years, and today I am most excited by the shipping industry’s challenge to achieve a carbon free future.

The impact that the environmental regulations will have on technologies and the consequent impact that technical choices will have on the reduction of global warming interests me greatly.

Being part of this transformation is really motivating.

Please share something personal about yourself.

At the beginning it was not easy. First, I had to learn to get my hands dirty, to spend days and nights aboard, in double bottoms and on top of cranes – coping with all of this and proving you can handle it even when at times you feel weak. But the experiences made me stronger and more confident. It’s like watching a time-lapse movie; engines not starting, calls in the middle of the night for pirate attacks, stowaways on the rudder, fire, collisions and crew abandoning the ship. However, it’s also a time lapse movie of great happenings: our crew celebrating awards, the launch of ships floating for the very first time, contracts signed, ships delivered, joint ventures, travelling and meeting lots of people from around the world!

Leaving your home country and your family is scary, but life is amazing, and I would have never met my husband if I had not left Italy.

On top of that though, nothing stopped me from having a family and being a mother. Olivia will turn four in March and Peter will be one this December!

What I would like to say to the future generation is that you can make it! And you can have it all! You can be a mother and have your career! Both at 100%! Motherhood is a free masters in time management, leadership and negotiation!
What role do you play in the gas-fuelled shipping sector?
In my current position I am commercially responsible for the development of LNG in the Port of Rotterdam. Together with our customers and industry partners, I am looking after our position as Europe’s leading hub for LNG bunkering and transhipment.

Please describe your role in your organisation and what do you enjoy most about it?
As the Port’s Business Manager LNG, Bunkering & Cruise I look after account management and business development in three market segments. Although a quite broad portfolio, LNG kind of connects all three segments. This year out of the one hundred cruise vessels currently on order, approximately 30% will be LNG propelled. This makes the cruise industry one of the front runners using LNG as a marine fuel.

At the Port of Rotterdam we are ready to bunker all types of LNG-propelled vessels, including cruise ships. We have dedicated areas for truck-to-ship bunkering and multiple bunker vessels who can deliver LNG ship-to-ship during operations. By next year we expect up to ten LNG bunker vessels will have a licence to operate in Rotterdam. Setting up this kind of new developments is what I like most about my job.

How did you arrive at this role? (Was it your intention at a young age to always go into this industry?)
After I graduated from law school in 2007, I began my career as lawyer at a big international law firm. It didn’t take long before I realised this was not the job for me. By coincidence, I came across a vacancy at the Port of Rotterdam Authority who was looking for a legal counsel. Working in the Port of Rotterdam sounded amazing to me. Ever since I was living in the city of Rotterdam, the port area intrigued me. Therefore, I didn’t hesitate to apply for the job.

For about three years, I looked after all sorts of maritime liability matters including oils spills and collisions. However, with the port getting safer every year and my growing passion for the port and the maritime industry, I realised I wanted to work more in the core business of the company and decided to switch to the commercial department which meant saying goodbye to my legal profession.

In 2013, I took up the role of Business Manager Tank Storage with the responsibility for setting up the commercial side of LNG bunkering. These were exciting times, from practically no LNG bunkering in 2013 to weekly SIMOPS LNG bunkering 6 years later! It is really thanks to our customers and business partners that we see a year-on-year growth in LNG bunkering and transhipment.

How have you worked with SGMF concerning the safe and sustainable use of gas as a marine fuel?
LNG as a marine fuel can only be successful if it safely handled. In that respect the work of SGMF is very important providing robust guidance on the technology challenge transition towards a more sustainable future.

The focus of my job is business development and commercial aspects of LNG. Since SGMF addresses the safety and environmental aspects of LNG bunkering, I mostly leave this to my good colleagues of the Harbormaster Division and Environmental Department who are actively involved in the SGMF board and working groups. My colleagues keep me posted on relevant SGMF activities and through the collaboration with Sea\LNG, I am always in the loop.

How do you feel this sector has embraced the talent and value of women?
The gas sector is a ‘man’s world’. On a global scale I believe only 15% of the gas and oil workforce is female, a number that drops in half when it comes to higher-paying technical jobs. Although evidently this number needs to increase, and the industry will need to do its upmost to attract and retain women, for me this is not that relevant. I love what I do and like the people I am working with. Man or woman, this doesn’t matter to me. What matters is mutual respect and trust and that is gender neutral.

What excites you or interests you most about this industry and how does this motivate you?
The maritime industry has relevance for everybody. In Rotterdam, we hire people for almost 400,000 jobs and have an added value of approx. 45 billion euro, similar to 6.2% of the GDP.

The international shipping industry is responsible for the carriage of around 90% of world trade. Shipping is the life blood of the global economy. Without shipping, intercontinental trade, the bulk transport of raw materials, and the import and export of affordable food and manufactured goods would simply not be possible.

Within the maritime industry we can make a difference. 2.5% of global GHG emissions are being emitted by marine shipping. This is comparable to a country like Germany. As one of the biggest bunker ports worldwide we are also taking our responsibility. Through several programs and a so-called three step approach we are stimulating the use of clean fuels from production to consumption.

In LNG we are recognising the cleanest option currently available which can also contribute in the reduction of GHG emissions. With bio or synthetic LNG as next step, GHGs can be reduced even further. Although still very small scale, the first initiatives are coming up and eventually, bio LNG can profit from all investments in regulations, infrastructure etc, that have already been made in LNG.

Please share something personal about yourself.
Don’t be afraid to change. Don’t think in limitations, but in possibilities and follow you dreams.

As an educated lawyer, I followed my heart and stepped away from the legal profession to fulfill a commercial position within the maritime industry. I never regretted this decision. Not only this is how I met my husband, but I also learned that the most important aspect in a career is that you actually need to feel passionate about the work you do. I am very grateful to everybody who helped and supported me. Make sure you are surrounded by the right people that you trust and are willing to help you but remember, in the end only you are responsible for your own luck.
Sarah Rollings
Project Manager, LNG for Marine Fuel – Shell

What role do you play in the gas-fuelled shipping sector?
As the Project Manager for LNG fuelled projects I led a team to supply LNG as marine fuel by ship to customers for the first time in the history of our company. Shell started supplying LNG fuel at the end of 2018 and I was responsible for a team that worked with the customers, their vessel operators, the bunker vessel, and the port stakeholders to ensure all parties were ready and knew what to expect for a first LNG bunkering operation.

How did you arrive at this role? (Was it your intention at a young age to always go into this industry?)
I have always been around the ocean and could not imagine a career that did not involve the ocean, although I did not know my career path would lead to the maritime or gas industry.
Growing up on the coast in California, studying Ocean Engineering in university, and joining the US Navy may not seem like the direct path but all contributed to my love of maritime and being in my current role. After the Navy, I worked on LNG terminal construction projects and commercial development. With thirteen years in LNG, I truly believe in the role LNG plays in the energy transition and now enjoy the opportunity to contribute to the shipping fuel sector.

How have you worked with SGMF concerning the safe and sustainable use of gas as a marine fuel?
My team was involved in many of the working groups that led to the valuable guidance documents published by SGMF. For an industry still relatively in its infancy, working with SGMF to develop industry guidance and best practices will help the industry grow and bring a level of consistency to parties across the sector. I believe it is important for companies like Shell to share best practices and our experience to help the industry grow successfully while maintaining a high safety standard.

How do you feel this sector has embraced the talent and value of women?
For me, the fact that there has never been an instance where I felt out of place or I was singled out is a testament to embracing the talent and value of women. I am seeing more and more women in meetings and forums, which is a strong indicator of the increased approachability of the sector.

What excites you or interests you most about this industry and how does this motivate you?
I am most excited about LNG being a real, available now solution to cleaner fuels. Although there are many initiatives aimed at doing more and being carbon neutral, LNG is something companies can use today, and I believe that it will be part of the clean fuel solution matrix for many years to come. Contributing to reduced emissions in ports and cleaner air is fantastic.

Please share something personal about yourself.
Early in my career, while attached to the Navy warship USS LaSalle (AGF-3), I learned the necessity of personal confidence in my own abilities which helped get me through that assignment and includes my first career highlight when I was responsible for navigating the ship into Venice. Seeing St. Mark’s Square outside my bridge window while giving steering commands was not something I thought I would being doing at the age of 22! That sense of confidence (and doing my homework) carried me while walking through male dominated construction sites for LNG terminals, especially in a foreign country, providing owner’s oversight, and leading the marine commissioning team. I knew that if I showed that I was uncomfortable, any confidence I had fostered in the stakeholders would disappear instantly. I also learned that confidence in my abilities does not equate to having all the answers and that developing a team that can achieve the goals of the project is equally valuable. The team I have now know much more than I ever will about LNG as fuel and we have been successful in physically starting a new business for Shell in the safe and efficient delivery of LNG to our customers.

www.sgmf.info
What role do you play in the gas-fuelled shipping sector?
FortisBC, along with the Government of British Columbia and the Vancouver-Fraser Port Authority, has a goal to establish the Port of Vancouver as the pre-eminent LNG bunkering hub for the West Coast of North America.

FortisBC has a long-established LNG production facility at Tilbury in Delta, British Columbia, located on the Fraser River, providing easy access for bunkering vessels. We are in the process of developing a marine jetty, which is currently in the Environmental Assessment phase, and which we anticipate having in service in 2020. Because FortisBC’s Tilbury liquefaction facility uses 100% renewable hydroelectricity to produce LNG, the LNG available from FortisBC has the lowest GHG footprint in the world. It’s also highly competitively priced, due to British Columbia’s extensive natural gas reserves and relatively low ambient temperature.

Please describe your role in your organisation and what do you enjoy most about it?
I lead FortisBC’s commercial efforts in LNG bunkering, building on our current relationships with our customers BC Ferries and Seaspan Ferry Corporation, and expanding into providing LNG for the coastal freight and international marine markets.

I most enjoy working with our great team here at FortisBC, building productive and successful relationships with our current and prospective customers and stakeholders, and building a brand-new business that provides great benefits economically and environmentally for FortisBC and for British Columbia more generally. Basically what keeps me going is doing well by doing good.

How did you arrive at this role? (Was it your intention at a young age to always go into this industry?)
By accident! I’ve worked at FortisBC and its predecessor companies in a series of roles since 2006. I’ve got a track record of successfully building new businesses within FortisBC, and that’s why I was given this opportunity. I’ve been lucky enough to have great bosses along the way that have let me execute on opportunities that we’ve identified, and great colleagues to work with.

How have you worked with SGMF concerning the safe and sustainable use of gas as a marine fuel?
Our team has representatives on various committees. SGMF has been a leader for the industry and is a crucial part of the LNG bunkering development puzzle.

How do you feel this sector has embraced the talent and value of women?
My own experience working in the marine industry has been entirely positive. Me and the team at FortisBC have been able to work through creating an entirely new LNG bunkering business within FortisBC, and for British Columbia more broadly.

What excites you or interests you most about this industry and how does this motivate you?
It’s quite simple for me – I want to do well by doing good, and the LNG bunkering business fits perfectly with that personal ethos. It’s a growing industry; we are creating a new business for FortisBC and British Columbia, and that’s always exciting because it’s unchartered waters and a chance to grow a new industry from scratch. Also, the folks that we are working with both internally in FortisBC, and externally with customers, regulators, business partners and stakeholders are excited and enthusiastic, so we’re all pulling towards a common goal, and that’s always motivating!

Please share something personal about yourself.
What I would share with future potential workers is that this is an exciting new industry. Establishing it will take careful thought, and hard work, and once we’ve got it rolling, we’ll be able to look back on a project that has created positive and lasting change that makes good business sense. If you’re not afraid of trying something new, or of the potential for failure because this is something new, and of working hard, the LNG bunkering business might be a good fit for you.
What role do you play in the gas-fuelled shipping sector?

From 2012 to 2017, I was in charge – as an ENGIE Shipping Project Manager – of the development of the world’s first purpose-built LNG Bunkering Vessel in partnership with NYK, Mitsubishi Corporation and Fluxys from the shipyard tender phase through design & production phases until delivery. The ENGIE Zeebrugge was built at HHIC shipyard in Busan, South Korea and was delivered in 2017.

In 2017, ENGIE decided to sell its upstream and midstream LNG activities, liquefaction, shipping and international LNG trading to Total and to refocus on three key businesses: low carbon power generation, infrastructures – notably gas, and integrated downstream customer solutions.

ENGIE is convinced that green gases are key to the energy transition. Hence it established a new entity dedicated to the development of renewable hydrogen.

Within this entity, I’m in charge of the development of renewable hydrogen usages – more particularly in port ecosystems (including maritime and inland shipping) and in railway environment.

Please describe your role in your organisation and what you enjoy most about it?

After more than six years spent at GTT (leading engineering company in containment systems for the shipping and storage in cryogenic conditions of LNG in Hydrodynamic and Ice divisions), I joined the ENGIE LNG Business Unit. My role as Shipping Project Manager concentrated on floating regasification projects (e.g. in Tianjin, China) and the development of an LNG bunkering vessel. In 2017, I joined the Key Program Green Hydrogen in Gas Chain Metier as Senior Project Coordinator to support ENGIE’s Business Units in the development of hydrogen mobility projects. When ENGIE Global Hydrogen Business Unit was created, I was part of it. I’m currently Vice-President in charge of the development of renewable hydrogen usages – more particularly in port ecosystems (including maritime and inland shipping) and in railway environment.

From a technical background, I have had the chance to develop other skills as project manager, and now as business enabler, through different entities (GTT, LNG, Corporate/Gas Chain Metier, Hydrogen), and in diverse fields (LNG, Hydrogen).

Being part of ENGIE Renewable Hydrogen Business Unit creation is a fantastic journey and a rewarding experience - both professional (development of projects, transversal activities) and interpersonal (co-creation, empowerment, out-of-the-box thinking, surpassing ourselves). It is very exciting but also tough – all in all a great source of motivation. Above all what I enjoy most about it is working in an international context to make the zero-carbon transition possible.

How did you arrive at this role? (Was it your intention at a young age to always go into this industry?)

I have an engineering degree in Naval Hydrodynamics and Offshore Engineering, and I’ve been involved in shipping since then. That’s what I always wanted to do. My Breton and family roots (my great-grandfather and grandfather respectively sailor and French navy officer) are probably part of the reason for this choice!

How have you worked with SGMF concerning the safe and sustainable use of gas as a marine fuel?

I had the honour to be ENGIE’s representative at the SGMF Technical Committee from 2014 to 2017 promoting best practice within the industry in the use of gas as a marine fuel.

During the LNG Bunkering Vessel design and construction phases, I was involved in risk analysis (HAZID) with port authority, LNG terminal, classification society, partners, client vessel owner, as well as LNG transfer system selection (clarification of regulatory issues, HAZOP).

How do you feel this sector has embraced the talent and value of women?

There are still very few women in shipping sector. I’m very grateful to ENGIE for enabling women to access same positions as men – even if it is still not an easy path. ENGIE’s CEO Isabelle Kocher (the only woman running a CAC 40 company), and ENGIE BU Hydrogen CEO Michèle Azalbert (among ENGIE’s 50 top managers) are two inspiring examples for women, promoting gender parity within the Group.

The situation evolves slowly but surely. Let me give you an example that reflects this mindset change: when ENGIE Zeebrugge was delivered, Michèle Azalbert (she was at that time the Head of Operations within ENGIE LNG BU) was asked to become her Godmother. It was the first time a female EVP was chosen for this role, as only wives of ENGIE top managers had been selected so far.

It is perhaps only an honorific role in this case, but it means a lot for women within the BU to have the possibility to be recognized and put forward. A few years later, Michèle was selected to lead the Hydrogen BU.

What excites you or interests you most about this industry and how does this motivate you?

Maritime transport is essential to the world’s economy as over 90% of the world’s trade is carried by sea and it is, by far, the most cost-effective way to move en masse goods and raw materials around the world.

IMO strategy targets a reduction in total annual GHG emissions from international shipping by at least 50% by 2050 compared to 2008, while, at the same time, pursuing efforts towards phasing them out entirely.

Developing zero-carbon solutions to reach this ambition is a great source of motivation.

Please share something personal about yourself.

I really like this quote from Isabelle Kocher: ‘Women too often say to themselves: ‘It’s too difficult. I’m not going to get there.’ I tell them: ‘Listen, do not question your abilities. Dare to do what you want to do and realise that you can do it.’”

No doubt such examples will inspire the future generation coming into the industry.
What role do you play in the gas-fuelled shipping sector?
As part of my work in the salvage world, I have played a role in the salvage workgroup to develop of salvage principles for LNG fuelled vessels. This is important as not everything is known about the consequences and their timelines in case such a vessel is involved in incidents.

Raising the awareness is the first thing that will be required to ensure people in the business start thinking about the consequences.

Please describe your role in your organisation and what do you enjoy most about it?
As a salvage master you play a leading role amongst various parties, to ensure the liaison between federal and local authorities, owners, underwriters, NGO’s, and other stakeholders. We also ensure that the salvage team on site can work well together with the propose back-up of logistics, equipment and planning to get the work done for the ship, cargo, bunkers, and the environment.

The enjoyment basically comes from the dynamics of the work.

How did you arrive at this role? (Was it your intention at a young age to always go into this industry?)
Actually, I never had the intention to do this type of work however, I was surely looking for something that added value and ensuring there is some kind of achievement in my life. Every day with a learning curve, whether personal or work-related, is most valuable and I definitely got what I wanted! Salvage can be very challenging and not always because of the magnitude of the operations, but to keep all parties aligned and focused on a common goal can be a challenge by itself. This is where common sense and engineering plays a big role and ensuring that individuals are not be carried away by strong opinions only. Just keep it simple!

How have you worked with SGMF concerning the safe and sustainable use of gas as a marine fuel?
I was actively involved with Work Group 3 which looked at salvage of gas-fuelled vessels and the output produced by this Work Group was the Technical Guidance Notice – Salvage Principles. This is also a starting point for new initiatives to keep the industry safe and sustainable in the future. Also, think outside the box!

How do you feel this sector has embraced the talent and value of women?
There is always room for more women to be involved, and although the maritime world, in general, is male dominated I do not really believe that we can speak of ‘embracing value of women’. What I recognise is that yes we can certainly encourage women to pursue technical studies for their professional life and yes women in general can add value to the discussion and have a good feel for oversight. But in the end, it is about the right people being in the right place and position, irrespective of gender.

What excites you or interests you most about this industry and how does this motivate you?
The challenge that I see is that the LNG fuelled industry handles so much more than the LNG tankers in the earlier days. It is bringing different maritime markets together with very different backgrounds. These need to come the same level of training, understanding and sense of responsibility when it comes to LNG. Whenever I can make a difference, even for one person preventing to make a crucial mistake, then a goal to improve the industry is successful. The more the better.

Please share something personal about yourself.
After many years in the maritime industry, as it can be very dynamic, I learned that one of the most important things is proper communication between parties and isn’t that just the most difficult thing in life nowadays with all the means for communication? The thing I learned is that one should not be afraid to speak up to ensure, that what you assume is (in)correct and that you always confirm that others have the same understanding. It seems very obvious, but it remains the part that can safe a person a lot of extra work and increase the safety levels by checking and asking questions. Just be you, stay honest, keep track of your stuff, and you will grow.
Xiao Le Koh
Senior Manager (Transformation) – Maritime and Port Authority of Singapore

What role do you play in the gas-fuelled shipping sector?
With the upcoming implementation of the 0.5% global sulphur limit on marine fuels by the IMO, my work at the Maritime and Port Authority of Singapore (MPA) supports the development of a comprehensive ecosystem covering fuel sources, suppliers, standards and procedures. This is to ensure that all types of fuel, including LNG, required by the shipping industry can be supplied safely when the ships call at the Port of Singapore. This is especially important given Singapore is the world’s largest bunkering hub.

Please describe your role in your organisation and what do you enjoy most about it?
Until recently, I was part of the marine fuel development and promotion team in MPA. My team develop a holistic fuel strategy for Singapore to entrench her position as the leading bunkering hub. It was a steep learning curve but also the best challenge I have had. I had to start learning from basics such as the properties of LNG, to technical challenges regarding the use of LNG during voyages and complexity of LNG bunkering operations. I enjoyed the process as I saw myself grow from someone who knew nothing about the industry to one who is able to develop policies to enable LNG bunkering in Singapore, connect the dots in the LNG ecosystem and support the growth of Singapore companies to take the lead in LNG bunkering.

How did you arrive at this role? (Was it your intention at a young age to always go into this industry?)
I had the opportunity to be part of this sector as this was an area that was given stronger emphasis in 2015. I was immensely lucky to be able to have this chance to challenge myself and see how the gas-fuelled shipping sector contributes significantly to Singapore’s economy and is part of the larger gas ecosystem.

How have you worked with SGMF concerning the safe and sustainable use of gas as a marine fuel?
I have participated actively in SGMF members’ meetings to anticipate and tackle challenges regarding the use of LNG as a marine fuel including supply of LNG, re-fuelling points as well as standards and procedures for safe bunkering operations.

How do you feel this sector has embraced the talent and value of women?
Although the gas-fuelled sector is still largely male-dominated, the sector has moved quickly to embrace talent and value of women. Balancing the demands of the sector require various skill-sets that allow both women and men to flourish.

I had the opportunity to share about Singapore’s efforts to establish an LNG bunkering ecosystem at the SGMF Members’ Meeting, held alongside the Singapore International Bunkering Conference and Exhibition (SIBCON) 2018. Many came to me afterwards to congratulate me on being part of this exciting, fast-moving and challenging “movement” towards the use of LNG as a marine fuel, which has been male-dominated. I felt grateful for the opportunity. I hope to see more women to join the sector.

What excites you or interests you most about this industry and how does this motivate you?
The dynamic nature of the industry excites me. Gas has been around for a long time. The use of gas as a marine fuel was introduced first in Norway about twenty years ago. But it gained little or traction until recent years. To do well, I have to be able to adapt to changing situations and to work with counterparts from different cultures. I also have to keep an open mind and embrace new challenges.

Please share something personal about yourself.
I went for a school trip on a cruise back in 2010. When I was boarding the cruise, I noticed that the funnels were really black and dirty. I wondered to myself: “Wouldn’t the crew have a hard time getting the black soot off?” When the Captain proudly explained how the cruise vessel optimises fuel burning to reduce air emissions, I recalled someone also asking: “Will we one day be able to power the cruise using cleaner fuels so that journeys can be as fast and efficient?” The idea of cleaner marine fuels seemed so distant then. I believe this is set to change as we are already seeing LNG-fuelled cruises today. I hope to be on an LNG-fuelled cruise to see the world some day!
Before we conclude this feature, I’d like to take this opportunity to introduce the women in the Secretariat who provide essential support services to our technical colleagues and members.

Support functions in a lot of organisations become more concerned with maintenance, but here at SGMF every day is exciting and focussed on innovation and everyone in the team is involved. We continuously question how we can do things differently and better to support our colleagues and members more effectively.

Lindsey Briscoe joined SGMF in 2013 as a contractor and helped with the initial establishment of the organisation in the UK. She officially joined the SGMF team in 2018 as our part-time finance manager. Her AAT qualification and experience ensures the Society’s finances are in safe hands!

Our latest recruit Lydia Dorai joined the Society as an assistant in January this year, starting of her career in the industry. Growing up in Greece it was almost inevitable that she would end up working in the maritime sector and so it was only natural that chose to study shipping at University. This degree, together with experience gained in her previous role with AP&A Ltd, gives Lydia relevant understanding of our membership and the wider industry.

I joined SGMF six years ago soon after the Society was created, but I had no knowledge or background of the maritime sector. Having grown-up in a leafy suburb of South London, careers in maritime were certainly not options presented to us by the careers advisory service at school. However, having previously been known as an “eco-warrior” before I started working in shipping, the environmental issues and climate change challenge facing the industry immediately captivated my attention. I was offered my position in SGMF based on my experience in small starts-ups. Additionally, my degree in accountancy, a diploma in human resources and experience in operations are what I brought to the, at the time, newly created Society.

Attending SGMF member meetings or events in the early months and years was certainly very daunting, especially in a male dominated industry where people expected me to know all about the issues the industry was facing. I must admit, in those early days I found not possessing the technical or operational knowledge, because I had not been to sea and didn’t have a chemical / engineering background, very tough. However, I soon realised that I had no choice but to take on the challenge and learn quickly. The first impressive facts that I learnt were that shipping is by far the cleanest and most efficient mode of freight transportation per tonne mile when compared to road, rail and air. Also, it is an industry that moves 80-90% of the worlds trade!

Along the way I have learnt so much more, but the most important lesson is not to be afraid to ask my colleagues questions to gather the technical knowledge that I need. We have a great technical team at the Secretariat, and they are incredibly patient. They always take time to explain, even if my questions are basic or silly, thank you team – I really appreciate it. I enjoy being part of an industry that is relevant, environmentally responsible and no matter what technological advances and challenges we have ahead of us, this industry will always be here.

Krishna