

# **Our Speakers**



Dan Barnett

Vice President of Engineering, BD Energy Systems, LLC.



Ian Barton

GSTC Database Manager

Dan is currently serving as VP of Engineering for BD Energy Systems, LLC. in Houston, TX, USA, Dan has more than 40 years of experience in execution of Furnace related work. His experience includes design of high-temperature reaction furnaces concentrating on steam-methane reformer furnaces for ammonia, methanol, hydrogen, & GTL plants, and cracking furnace designs for ethylene plants. Experience includes commissioning, start-up, and field advisory services on all types of furnaces in grassroots plants, furnace revamps, and plant expansions. He holds a BS in Chemical Engineering, 1981, from Drexel University, in Philadelphia. He is a member of AIChE, a member of the Ethylene Producers Conference – Maintenance & Reliability Subcommittee, and is named in five furnace-related Patents plus two Patents Pending.

Ian has a Masters degree in Chemical Engineering from Cambridge University in England. Ian worked for ICI and Johnson Matthey for 36 years before retiring recently. He worked in several areas related to Syngas technology, including methanol technology licensing, ammonia catalyst development and SNG business management. He is supporting the GSTC by managing the plant and project database that is available for GSTC members via the website.



Daniel Casioppo

Technical Authority, Modumetal Daniel Casioppo is the Technical Authority for Modumetal. He serves as the company expert on Modumetal's products and technology. He works directly with R&D, manufacturing, sales, and end-users to define performance requirements and drive commercialization of Modumetal's products. Daniel began his career in Houston Texas as a metallurgist for Exova laboratories, where he developed sound understanding of qualification testing and conformance assessment of materials used across the Oil & Gas industry. He holds a Bachelor's degree in Materials Science & Engineering from Lehigh University.



# Our Speakers



Ken Chlapik

Global Market Manager, Johnson Matthey Ken Chlapik is the Global Market Manager for Johnson Matthey's Catalysts and Technologies Low Carbon Solutions business. He is based in the Chicago area in Oakbrook Terrace IL USA being responsible for solution development of JM's Low Carbon Technologies which enable our customers to decarbonize their syngas production plants and facilities. Most of Ken's career has been involved with the growth of steam methane reforming hydrogen use in the oil refining industry that has tripled during this time with hydrogen production projected to be a magnitude larger in the next two decades through the energy transition. Ken holds a B.Sc. degree (Chemical Engineering, 1981) from Northwestern University in Evanston IL. He was recently recognized by the American Fuel and Petrochemical Manufacturers (AFPM) with the Peter G. Andrews Lifetime Service Award. Ken has been in the industry for 40 years and with Johnson Matthey for 35 years.



### Mark Danks

Global Director for Low Carbon Solutions, Johnson Matthey, UK



Delome Fair

Principal Process Engineer, KPE Mark joined JM in 2001 directly from a PhD in Chemistry; starting in the platinum group metals business as a Development Chemist and then into Sales and Marketing, including four years based in the US. He later moved into Catalyst Technologies in various commercial leadership roles, with the last six years as Commercial Director, Chemicals, where he was responsible for technology licensing, catalysts sales, and technical services. In his new role, Mark's focus is on establishing JM as a leading solutions provider for the decarbonization of existing chemical processes.

During her nearly 30-year career, DeLome Fair has been responsible for more than 30 syngas, hydrogen and gasification projects. She has led design and start-up teams and has performed technical services for several of these. As a Principal Process Engineer at KP Engineering (KPE), Fair has taken significant design responsibility on a 9,000 BPD Renewable Diesel Unit and the lead role on 45 MMSCFD and 87 MMSCFD hydrogen plant projects. Prior to KPE, Fair served as president and CEO of Synthesis Energy Systems, Inc., which focused on commercializing, licensing and deploying new syngas production technology, in various syngas-related leadership roles for the General Electric Company (GE), and as a lead engineer in Texaco's syngas, hydrogen and power businesses. Fair holds a master's degree in chemical engineering from the University of Kansas and is a member of the Society of Women Engineers.



# **Our Speakers**



Andrew Fenwick

Methanol Market Manager, Johnson Matthey Andrew has been in the syngas industry for nearly 25 years, starting in ICI supporting a naphtha to olefins plant, before moving across to the catalyst business. He spent 2 years on assignment to the largest DRI plant in the world, in Australia, where he met his wife. On return to JM, he supported the manufacture of nickel reforming catalyst before moving to the licensing business to lead the process design of methanol plants. He spent 5 years as a licencing manager, spending a lot of time in China and has, for the last two years, been the Methanol Market Manager.



### Nils Gathman

Lead Process Engineer, Steinmüller Engineering GmbH As Lead process engineer, Nils Gathmann handles thermal energy storage concepts at Steinmüller Engineering GmbH, Germany, a globally acting company designing and delivering key components for the power industry like boilers, burners and flue gas cleaning systems. He has worked in the power industry for 14 years. Among other roles, he was involved as process engineer in the design and development of thermal energy storage systems for concentrated solar power plants and as head of a process development team in several research projects dealing with molten salts. He holds a Mechanical Engineer Degree from the Technical University of Aachen, Germany and is now working with his colleagues on decarbonization solutions with thermal energy storage.



Grant Grothen

Principal, Burns & McDonnell

Grant Grothen is a Principal with Burns & McDonnell, a \$4.0 billion USD international engineering company. Grant has over 30 years of electric utility experience including nuclear, renewable, and fossil generation. His current focus is leading the International Business Unit for Energy targeting Southeast Asian and Mexico markets in additional to leading three strategic emerging market teams for U.S. markets. Grant holds a Bachelor of Science degree in Electrical Engineering from the University of Nebraska, a Masters of Business Administration from University of Missouri Kansas City and is a registered Professional Engineer.



# Our Speakers



Pierre-Philippe Guerif

Solution Development Manager, Air Liquide Pierre-Philippe is a Solution Development Manager working for Air Liquide Global E&C Solutions US, focusing on CO2 capture technologies and cryogenics. He joined Air Liquide in 2011 as a process associate for Air Separation Units and CO Cold Box design in the engineering center in Champigny, France. He relocated to the US in 2013 to support a large CO2 capture FEED. After an experience as Process lead on proposals, Pierre-Philippe moved to the Solution Development position in 2019. He was named "International Expert" in Product/Solution Development in 2020. Pierre-Philippe holds a Master Degree in Process Engineering from the School of Mines of Saint-Etienne (France) and in Oil and Gas Process engineering from the IFP School (France).



### Ashish Gupta

Process Director, IHI E&C International Corporation





John Hesemann

Principal Geological Engineer, Burns & McDonnell John Hesemann is a principal geological engineer at Burns & McDonnell with over 23 years of experience in the environmental and geo-engineering fields. He manages and supports multidisciplinary projects and supports nationwide strategy development, technical execution, and thought leadership. His recent experience includes the evaluation and development of projects related to the capture, injection, and geologic sequestration of carbon dioxide waste streams.



## Our Speakers



Jerry Kassman

Commercial Director Gasification, Air Products Jerry is responsible for licensing all Air Products' gasification technologies including Dry feed, Slurry, Oil and POx.

Jerry has 30+ years experience in gasification with that experience spread over many different roles including R&D, field services, plant engineer, engineering management, plant management, licensing and commercial management.

Jerry has a B.S. in Chemical Engineering from Carnegie Mellon University. He is the author of eight patents and several technical publications.



Kasper Larsen

Principal Scientist, Haldor Topsøe



Daniel Lefevers

Vice President Business Development, Sungas Renewables Kasper is the project manager for eSMR catalytic system design and development. He has a Master in Chemical Engineering degree from the Technical University of Denmark (DTU). He has worked for Haldor Topsøe since 2006 within Automotive, Sulphur and Reforming technologies.

Mr. LeFevers leads SunGas Renewables's business development activities and has a 30-year career in the energy business working for a an Illinois utility focused on alternative fuel use in transportation, with Gas Technology Institute (GTI) in project and program development and with a privately held waste company in governmental affairs in Washington DC. Mr. LeFevers was one of the original GTI staff that helped to create SunGas Renewables which provides to the market a gasification syngas delivery system based on GTI developed technology. He has extensive governmental affairs experience in various States and in Washington D.C. and has collaborated with scientists and engineers to deploy energy technologies in projects throughout the United States. Mr. LeFevers has held various roles in business development and governmental affairs at Peoples Energy, Waste Management and GTI. He also led development and project efforts for a site-specific engineering design for an RNG production facility fueled by wood wastes. Mr. LeFevers has a BA in Speech Communication and MA in Organizational Leadership.



## **Our Speakers**



Andrew Lopez

Senior Pipeline Facility Engineer, Burns & McDonnell Andrew Lopez is a senior pipeline facility engineer at Burns & McDonnell with over 16 years of experience involving pipeline leak detection and pipeline modeling and design projects including for crude oil, gasoline, diesel, ethylene, xylene, natural gas, and CO2 pipelines. Andrew's master's capstone research focused on CO2 transport and sequestration within Southern California, with an emphasis on creating a multi-directional CO2 pipeline network.



Chris Mamen

Vice President Engineering, OMNI Chris brings hands-on engineering and operations experience from OMNI's core IP development at Plasco Trail Road. He has project managed turnkey oil & gas facility projects employing a concurrent engineering-designfabrication-construction strategy. He is an oil & gas industry expert in clean technology development and emissions management. Guided oil & gas companies on emissions reduction strategies; developed emissions offset (EO) projects; commercialization of novel emissions control products. Vice Chair of national standard governing emissions control devices in the oil & gas industry. He rejoined with OMNI in 2021 to lead engineering in commercialization of OMNI's GPRS.



John Oyen

Manager of Business Development, ABB John Oyen has over 40 years of experience in process engineering, operations and maintenance, construction, and automation. Having worked for operating, construction and several automation companies, his broad experience working with EPC's, finance, developers, and operating companies brings a complete knowledge/network base into the picture for the bioeconomy, hydrogen, CCUS and circular economy markets. He holds a BSChE degree from the University of Texas at Austin.



# **Our Speakers**



Franz Petzold

Sales Lead, Syngas NA, Clariant Corporation Franz Petzold is Clariant's sales team lead for syngas/hydrogen North America, BU Catalysts. He received a Master of Engineering in Chemical Engineering from the University of Louisville in 2011 and joined Clariant as a research chemist at its Louisville R&D center. Before joining Clariant's syngas group in Houston, TX in 2019 he was a sales account manager for custom catalysts and technology scout in business development. In his current role Franz intends to further Clariant's engagement with current and future partners to deliver world class syngas solutions.



Eli Philipp

Director Business Development and Sales thyssenkrupp Uhde USA, LLC



Chris Ploetz

Process Technology Manager, Burns & McDonnell Eli Philipp is a Director of Business Development & Sales for thyssenkrupp Uhde USA. With over 20 years of experience in development, operations, design and sales of syngas generation and conversion technologies, Eli has a background well suited to assisting customers during all stages of process and project development and execution. In his almost eight years with thyssenkrupp Uhde, he has successfully leveraged the technology focused EPC's global organizational expertise for the needs of the local North American market.

Chris Ploetz is a Process Technology Manager for Burns & McDonnell Oil, Gas & Chemical Division. He focuses on developing projects from initial idea to final investment decision as well as maintaining technical excellence and design intent during project execution. Chris has almost 20 years of experience in process engineering, process development, technology licensing, and training in the refining, midstream, and chemicals segments. His work has spanned from early development through detailed engineering, construction support, start-up and troubleshooting. He has a B.S. in Chemical Engineering from the University of Kansas, a M.S. in Chemical Engineering from the University of Maryland-College Park, and is a Registered Professional Engineer in Kansas.



## **Our Speakers**



Henrik Rasmussen

Vice President of Catalyst and Technology, Haldor Topsøe



Megan Reusser

Senior Development Engineer, Burns & McDonnell Henrik Rasmussen graduated from the University of Copenhagen in 1989 with a degree in chemical engineering before relocating to the United States in 1991. He has worked at Haldor Topsoe for over 32 years and has held many technical and management positions for all Topsoe's business units. His technical expertise covers the Ammonia, MeOH and Hydrogen plant industry and specifically the refining industry for both catalyst and technology. In the last few years, Henrik has been heavily involved with Topsoe's green and blue process technologies for the production of renewable fuels, green and blue Ammonia, MeOH and hydrogen. Since 2007, Mr. Rasmussen has been the Vice President of Catalyst and Technology with responsibility of Topsoe's catalyst and license technology business for the U.S., Canada, and the Caribbean. In early 2021, Henrik assumed the role as Managing Director for the Americas responsible for Topsoe business in North and South America with offices in Houston, Los Angeles, Mexico, Brazil and Argentina.

Megan Reusser is a senior development engineer, bringing a decade of industry experience to support our clients at Burns & McDonnell. She has a diverse background in front-end project development. Her previous experience includes process engineering, proposal management, and cost estimation – creating a unique blend of both technical and commercial expertise – that she uses to support EPC projects and proposals and provide clients with technical solutions that optimize process design, lower energy consumption, and decrease overall cost. She specialize in liquefied natural gas (LNG) facilities and other emerging energy storage technologies such as hydrogen and liquefied air.



Tim Vail

Co-Founder, Chairman & CEO, Arbor Renewable Gas LLC Tim has a long career of successfully building energy companies in the downstream and alternative energy arena. His latest venture, Arbor Renewable Gas, focuses on the conversion of waste wood biomass into pure hydrogen at industrial scale for chemical producers and refiners. Prior to Arbor, Tim founded G2X Energy in May of 2012. Tim grew the business into one of the largest producers of methanol in the world, commissioning the world's largest methanol plant located in Beaumont, Texas. In May of 2018, Tim sold G2X Energy. Prior to his current position, Tim was President and CEO of Synthesis Energy Systems, Inc, a global developer of coal gasification facilities. During his tenure at SES, Tim successfully listed the company on the NASDAQ. Before SES, Tim held various leadership roles including Director of Commercialization of General Motors fuel cell program, head of alternative energy technologies at Enron Corporation and an MLP securities law practice with Andrews & Kurth. Tim holds a J.D. from the University of Houston Law Center and a B.A. in Economics from The University of Texas at Austin.



# **Our Speakers**



Dominic Varraveto

Chief Process Engineer & Director of Process Technology, Burns & McDonnell



#### Thilo von Trotha

Business Development Director, Linde



John Winter

Director, Gasification North America Arvos Schmidtsche Schack LLC Dominic Varraveto is Chief Process Engineer and Director of Process Technology for Burns & McDonnell Oil, Gas & Chemical Division. Dominic provides technical guidance for opportunities and projects during early phase development and a bridge between technology and process engineering across multiple process industry segments. His current focus is strategic guidance and thought leadership for growth and sustainability in the process industries energy transition. Dominic has over 40 years of process engineering, management and leadership experience in oil, gas & chemical including management, engineering, process development, start up and operations support. He has a B.S. in Chemical Engineering from the University of Notre Dame, a M.S. in Engineering Management from the University of Kansas and is a Registered Professional Engineer in California.

Thilo works as Business Development Director at Linde, formerly Praxair. One of his main tasks is to develop the best suitable technical concept and scope for a business approach and prepare an economic evaluation for that concept. He supports the engineering disciplines to take-over the scope in the planned way. He provides ideas to R&D to drive critical next steps in technology improvements. For 30 years, Thilo was involved in process synthesis, process engineering, and technology development. One of his topics is the production of hydrogen, methanol, and ammonia, and chemicals. He made the conceptual design for SMRs totaling a production of more than 600 MMSCFD hydrogen. Thilo earned his chemical engineering diploma and PhD at the University of Dortmund, Germany.

Dr. Winter has over 45 years of experience in the petrochemical industry with more than 30 years of experience in gasification. He started in the industry as an operations engineer in a gasification facility at Dow Chemical. He later joined Texaco and spent several years in Texaco's gasification research unit at Montebello, California developing waste gasification technologies. After that he became the General Manager for the operation and maintenance of a pet coke gasification facility run under contract for the project owner. The contract period covered completion of construction, commissioning and startup, and initial operations. Later he came into Texaco's corporate level engineering team where he led the design and manufacturing of the proprietary components in the Texaco/GE gasifiers. After GE bought the Texaco technology, he was named Chief Engineer by GE. After leaving GE, Dr. Winter served as Vice President of Engineering at Evergreen Energy, Inc. and Senior Vice President of Technology at Range Fuels, Inc., a biofuels company. Prior to joining Arvos, he spent 9 years with Synthesis Energy Systems, a fluid bed gasification technology company covering engineering, technology, and operations.



# **Our Speakers**



Sean Yan

Product Manager, Air Products Sean Yan is the Blue Hydrogen Product Manager in Air Products' Process Gases Business. Sean is mainly covering development of Blue H2 Plant Product based on AP's technology portfolio including POx and others. Sean has over 15 years direct experience in Hydrogen purification, gasification and related areas, including process design, commissioning & startup support, revamping, technology licensing, packaged equipment sales and Product Development lately.

Prior to his current role, Sean was the Technical Sales Manager with UOP in its global Hydrogen Business over six years. Sean also holds Technology Manager in KBR's coal gasification business and senior technical staff role in GE Energy's Gasification & IGCC Technology. Sean holds a Ph. D in chemical engineering from University of Utah.



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