





Smart Technologies for a Smarter Planet (Covering Smart Manufacturing, Smart Cities & Smart Energy)

# Speaker Profiles for 4th Fraunhofer Innovation and Technology Platform 2016 (FIT)

The order of the profile is as per the programme of the event '4th Fraunhofer Innovation & Technology Platform 2016'

# Guests of Honour for 1st Sept

Dr. V K Saraswat, former Secretary Defence R&D and Member Niti Aayog.



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**Dr Vijay Kumar Saraswat,** India's most gifted scientist and an accomplished researcher with more than four decades of experience spanning over several fields and areas in both basic and applied sciences of defence research. Apart from being a scientist, he is a rare combination of an innovator, technologist and visionary. Dr Saraswat presently is the Member NITI Aayog and shouldering many Honorary positions in Government and Academic Institutions.

During his illustrious career, from Scientist to Scientific Adviser to Defence Minister, Director to Director General DRDO and Secretary to Dept of Defence R&D, Dr Saraswat has been credited with development of Liquid Propulsion Rocket Engines and missiles namely PRITHVI, DHANUSH, PRAHAAR indigenously. He is the principal architect of the Ballistic Missile Defence programme which included major technology breakthroughs. The successive interceptions of incoming target ballistic missiles at Exo and Endo atmospheres are a testimony to his dedicated efforts and exploitation of limited technological resources. With this India joined the select nations that have the capability to develop BMD systems. Under his leadership, DRDO provided the technologies developed by them for societal benefits namely Solar Powered Modular Green Shelters, Bio-Digesters, AAHAR programmes, explosive detection kit, Diagnostic Units for Dengu and Chickengunia etc. Dr Saraswat's pioneering efforts have taken shape into establishment of Research & Innovation Centre at IIT Madras; MILIT- Centre for Training needs of armed forces on S&T; CERT for reporting, auditing and handling emergency response of Information Security Incidents; CHESS – futuristic technology Centre for High Energy Laser and Microwave devices; Kyrgyz-Indian Mountain Bio-Medical Research Centre at Kyrgyzstan; The new international airport and Aerospace SEZ at Hyderabad and Advanced Combustion Research Centers at IISc andIIT(M)

**Dr Saraswat** is the recipient of many national and international awards including PADMABHUSHAN (2013), PADMASHRI (1998), Vikram Sarabhai Memorial Award from Indian Science, Congress (2011); Lifetime Achievement Award by Ramakrishna-Vivekananda, International Foundation, New Delhi and many more.



## Prof. Eicke Weber

Director, Fraunhofer Institute for Solar Energy Systems ISE



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**Prof. Eicke Weber** is the Director of the Fraunhofer Institute for Solar Energy Systems ISE and professor of Physics/Solar energy at the Department of Mathematics and Physics and the Department of Engineering respectively at the University of Freiburg, Germany. He is also Chairman of the Fraunhofer Energy Alliance. Fraunhofer ISE is the largest solar energy research institute in Europe and is renowned worldwide for its research in the field of renewable energy and energy efficiency.

Prof. Weber was elected Founding President of the Berkeley Chapter of the Alexander von Humboldt Association of America (AvHAA) and acted from 2001-2003 as president. In 1994 he received the Alexander von Humboldt Prize and in 2006 the Award of Merit (Bundesverdienstkreuz am Bande) of the German President. He is a fellow of the American Physical Society and Founding President of both the German Scholars Organization (GSO) and the German Energy Storage Association (BVES), Berlin.

In July 2008, Prof. Weber was appointed Director of the SEMI International Board of Directors. The Electrochemical Society ECS, San Francisco honored Prof. Weber with the Electronics and Photonics Division Award in June 2009. In October 2009, he was elected Honorary Member of the loffe Physical-Technical Institute of the Russian Academy of Sciences, St. Petersburg. Since April 2010, Prof. Weber is a member of acatech – the German Academy of Science and Engineering, Berlin. He was appointed Managing Director of the Centre for Renewable Energy at the University of Freiburg in May 2013. In June 2013, Prof. Weber was honored with the *SolarWorld Einstein Award*. In January 2014, he received the Zayed Future Energy Prize, endowed with 1.5 million US dollars, from the Crown Prince of Abu Dhabi on behalf of Fraunhofer ISE.

As researcher in the field of material science, Prof. Weber analyzed lattice defects in silicon and III-V semiconductors. In recent years, he is especially interested in producing high-quality solar cells from upgraded metallurgical silicon, or umg-Si, without the use of chlorine-based chemicals.



#### Prof. Dr. Boris Otto

Director, Information Management & Engineering at Fraunhofer IML Head of the Fraunhofer Innovation Center for Logistics and IT (FILIT)



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**Prof. Boris Otto** is the head of the Fraunhofer Innovation Center for Logistics and IT (FILIT) in Dortmund, Germany. FILIT aims at strategic research and innovation in the field of digitization of industrial and logistics processes. Apart from that, Prof. Otto is leading the Fraunhofer activities towards the Industrial Data Space, a joint effort between industry and research and supported by the German Federal Government to create a network of trusted data to facilitate the emergence of smart service and **Industry 4.0** scenarios. Prof. Otto also holds the Audi-endowed Chair of Supply Net Order Management at TU Dortmund University. He is chairman of the advisory board of CDQ AG, St. Gallen, Switzerland, and member of the board of the Graduate School of Logistics in Dortmund, Germany.

Prof. Otto's main fields of research and innovation are **Industry 4.0**, Industrial Data Management, Information and Supply Chain Management. He obtained his post-doctoral qualification ("habilitation") from the University of St. Gallen, Switzerland und a PhD in Engineering (Dr.-Ing.) from the University of Stuttgart, Germany. Prior to his current positions was a visiting research scholar at the Center for Digital Strategies at the Tuck School of Business at Dartmouth College in Hanover, NH, a post-doc researcher at the Institute of Information Management at the University of St. Gallen, and a research assistant at Fraunhofer IAO in Stuttgart, Germany. Furthermore, Prof. Otto worked as a business consultant at SAP as well as at PricewaterhouseCoopers.

Prof. Otto is author of more than a 100 scientific publications and is frequently invited to talks and presentations at large-scale industry events.



# Ms. Anandi lyer Director, Fraunhofer Office India



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Ms Anandi lyer heads the Fraunhofer Gesellschaft, India Office and is a Special Advisor to the Federal Ministry of Education and Research Govt. of Germany (BMBF).

As part of the Fraunhofer activities, she has prepared the Strategy of Fraunhofer entry to India, acquired projects of nearly 4 Million Euros in a record 3 and a half years and established a strong network of research partners and industry clients who are of the top 50 of the Indian Industry. As Representative of the Federal Ministry of Education and Research, Govt. of Germany, she has coordinated the Research Marketing Campaign 2009- 2011 and the Science and Technology participation in the Initiative: Germany and India Infinite Opportunities- 2011- 2013. Ms. Iyer supports and advises the BMBF on strategic issues related to the Indo German Science and Technology initiatives, participates in the Jury for project evaluation and also supports contact management to Indian authorities. She is also a member of the Indo German expert Group on Green and Inclusive Economy, set up by the Federal Ministry of Environment, Govt. of Germany.

As Deputy Head of the German Agency for Technology Cooperation (1995- 2002), Ms. Iyer broke through the glass ceiling being the first Indian to assume this post. She was responsible for the strategic partnership with Institutions, managing a budget of nearly Euros 50 Million for deployment in India. She has more than 20 years of professional experience in middle and top management, spanning a wide spectrum of journalism, development cooperation, technology partnership and corporate relations, most of which has been in the Indo European corridor.

Mrs. Iyer is the Chairperson of the European Business Group (EBG, Bangalore Chapter) and a National Council member of the Country Council of the EBG. She is also Member of the Indo German Expert Group on Green economy, set up by the Federal Ministry of Environment, Govt. of Germany. Ms. Iyer is an MBA from Strathclyde Graduate Business School, UK specializing in Strategy and Business Communication, and has Masters in German Language. She is trained in intercultural moderation techniques and change management. She writes in the national and international media on subjects of business interest. Ms Iyer has won awards on leadership and excellence, including the Outstanding Woman Achiever Award 2013 by ISBR School of Management and Public Relations Council of India. Ms. Iyer possesses excellent communications skills, is an excellent orator and speaks many Indian languages as well as English and German fluently.

## Prof. Dr.-Ing. Holger Kohl

Head of the Corporate Management Division
Fraunhofer Institute for Production Systems and Design Technology IPK



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Prof. Dr. Holger Kohl is Professor for Sustainable Corporate Development at the Technical University of Berlin and Director of the Division Corporate Management at Fraunhofer Institute for Production Systems and Design Technology (IPK), Berlin/Germany. He studied Business Engineering at the Technical University of Berlin and at the Haas School of Business at the University of California, Berkeley. In 1999 Prof. Kohl joined the Division Corporate Management at Fraunhofer IPK as a Senior Researcher. Since then he has initiated and conducted several national and international projects on Strategic Planning, Knowledge Management, Intellectual Capital, Benchmarking and Business Process Reengineering and was responsible for their realisation. Beside projects all over Europe, Prof. Kohl managed large scale projects in Brazil, Indonesia, Vietnam, Malaysia, UAE, Egypt, China, etc. His primary research interests are in the area of Sustainable Manufacturing, Strategic Planning and Implementation of Innovation Systems, Intellectual Capital Management, and Benchmarking, in both the public and private sector as well as in the industry and service sector.



#### Research Contributions highlights

- Development of the Integrated Benchmarking Method for SMEs worldwide application (BenchmarkIndex)
- Method for the Assessment of the Performance of Applied Research Organization Application in Developing Countries and Countries in Transition e.g. Vietnam, Indonesia, Serbia, Montenegro, Egypt)
- Method for the Assessment of the Performance of University Research Application in Developing Countries and Countries in Transition e.g. Vietnam, Indonesia, Serbia, Montenegro, Egypt)
- Method for the Assessment of Innovation Management at SMEs German-wide Analysis
- Worldwide Assessment of the Application of Benchmarking Research Study with the Global Benchmarking Network.

# Guests of Honour & Inauguration

Shri. Anant Gangaram Geete, Hon'ble Minister, Ministry of Heavy Industries & Public Enterprises (HI&PE), Govt. of India



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Honorable Shri. Anant Gangaram Geete, Union Minister of Heavy Industries and Public Enterprises, is a senior leader of Shiv Sena. He represents the Raigad constituency in Maharashtra. He has been elected as MP six times (in the years 1996, 1998, 1999, 2004, 2009, and 2014). During his tenure in the parliament, starting from the year 1996, he has been part of several committees including Railway Convention, General Purposes, Business Advisory, Committee Urban and Rural Development, Ministry of Human Resource Development's Consultative Committee, Committee on External Affairs, Estimates, Ministry of Civil Aviation's Consultative Committee, Food, Consumer Affairs & Public Distribution, Business Advisory, and OBC Committee.

He first became Minister of State of Ministry of Finance, Banking and Expenditure in 2002. He was handed the power portfolio and remained in that position up to May 2004. He was inducted in the cabinet as the Union Minister of Heavy Industries and Public Enterprises on May 27, 2014.



#### Some Important Positions held by Honorable Shri. Anant Geete

- 1985-92 Councilor, Municipal Corporation, Mumbai
- 1990-92 Chairman, Standing Committee on Municipal Corporation Mumbai
- 1996 Elected to 11th Lok Sabha from Ratnagiri (1st term).
- Chief Whip, Shiv Sena Parliamentary party
- 1996-98 Member, Committee on Urban and Rural Development
- 1998 Re-elected to 12th Lok Sabha (2nd term)
- 1998-99 Member, Committee on External Affairs and its Sub-Committee-III.
- Member Consultative Committee, Ministry of Human Resource Development
- 1999 Re-elected to 13th Lok Sabha (3rd term).
- Leader, Shiv Sena Parliamentary Party
- 1999-2000 Chairman, Committee on Urban and Rural Development. Member, Business Advisory Committee.

## Prof. Frank Treppe

Director, Corporate Strategy and International Affairs Fraunhofer-Gesellschaft



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**Prof. Frank Treppe** is member of Fraunhofer's top management team at its Headquarters in Munich. As an Associate Member of the Board and Director Corporate Strategy and International Affairs of Fraunhofer-Gesellschaft, he is in charge of Fraunhofer's strategic business development. In this capacity, Frank Treppe has a wide range of domestic and international responsibilities. He is President of Fraunhofer USA, Chairman of Fraunhofer UK and Fraunhofer Chile and Member of the Supervisory Board of Fraunhofer Austria and Fraunhofer Sweden. In addition, Frank Treppe is Member of the Board and Vice President of EARTO, the European Association of Research and Technology Organizations, and he serves as evaluator in the technology programs of the European Commission.

On behalf of Fraunhofer-Gesellschaft, Frank Treppe was in charge for the incorporation and operation of Fraunhofer USA. As Vice President and Chief Operating Officer of Fraunhofer USA, he initiated the launch of six Fraunhofer research centers. When Frank Treppe left Fraunhofer USA, he set up a company of his own in Michigan which later on founded together with Fraunhofer-Gesellschaft and others an additional technology marketing firm in Germany.

He has graduated in Mechanical engineering from the Technical University (RWTH) in Aachen, Germany. His professional career started in 1982 at the Fraunhofer Institute for Production Technology in Aachen. Since then, he has served in various managing positions at different Fraunhofer Institutes and companies in Germany and in the United States.



#### Martin Hanz

Deputy Chief of Mission (DCM) and Head, Department for Economic and Global Affairs



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The Ambassador is supported in his role by the Deputy Chief of Mission Dr. Martin Hanz, who represents the Ambassador inside and outside the Embassy in all areas. The Department for Economic & Global Affairs is engaged with Indian stakeholders on global issues focussing on tangible results in business, trade, agriculture, energy, environment, sustainable development, higher education, vocational training as well as science & technology. His previous works include –

2011 - 2014: Inspector of the Foreign Office

2009 - 2011: Ambassador of the Federal Republic of Germany to Estonia, Tallinn

2006 - 2009: Permanent Mission of Germany to the United Nations, New York, Head of Political Department

2001 - 2006: Federal Foreign Office, Berlin, Director, EU Department

1999 - 2001: European Parliament, Deputy Head of Cabinet of the President, Brussels

1995 - 1999: European Commission, Cabinet of the President, Deputy Head of Cabinet of the Commissioner for Industry, Brussels

1993 - 1995: Permanent Mission of Germany to the European Union, Brussels

1989 - 1993: Federal Chancellery, Speechwriter of the Federal Chancellor, Bonn

1986 - 1989: German Embassy, Tokyo

1984 Dr. jur. Munich University (LMU)

1983 - 1985: Federal Foreign Office, Bonn

1980 - 1983: Judge's Assistant, Second State Examination in Law

1979 - 1980: Postgraduate Studies at Sorbonne University Paris

1979 First State Examination in Law

1975 - 1979: Law Studies at the University of Munich (LMU)

1973 - 1975: National Service - Federal Army



#### Dr Arabinda Mitra

Adviser & Head, International Cooperation (Bilateral) Department of Science & Technology, Govt of India



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After receiving Master's degree in Geology from Patna University, Arabinda Mitra started his career in 1985 as a research scholar at Delhi University on a Government of India Fellowship. In 1987 he joined the Department of Atomic Energy as a Scientific Officer, and was involved in survey and exploration geology of the Himalayas. In 1988, he was awarded the prestigious Cambridge Nehru Fellowship to pursue PhD in Earth Sciences at Cambridge University, UK. The project work was carried out jointly with MIT, USA in the area of mid-ocean ridge hydrothermal systems. His research work has been published in international journals like Nature, Marine Chemistry, Geo-chimica Cosmo-chimica Acta, and Journal of Remote Sensing etc. In 1993, Dr. Mitra was appointed as Senior Scientific Officer in the Indian Antarctic Program of the Department of Ocean Development. He has to his credit the planning and launching of several multi-disciplinary experiments in Antarctica and inducting a strong element of international cooperation in the program. He was nominated as Indian representative to international Antarctic Treaty bodies like SCAR & COMNAP. In 1998, Dr. Mitra moved to the National Centre for Antarctic & Ocean Research at Goa, in the capacity of Program Manager, Science. He played a seminal role in formulating the long-term science strategy of the Indian Antarctic mission and also established the low temperature ice core and environment study laboratories at NCAOR. In the course of the above assignments, he has won several academic awards like the ORS Award of UK; Bursary Award of St. Edmund's College UK; and JSPS Award of Japan and was also elected as a Fellow of the Geological Society, London. He has been a member of the Indian expedition to Antarctica and has undertaken scientific cruises to the Indian, Atlantic and Southern Oceans. In 2001, Dr. Mitra joined as Director/Scientist-F in the Department of Science & Technology, Government of India. He proficiently enriched the scope and contents of the DST-NSF cooperation. In Nov 2004, Dr. Mitra was confirmed as the first Executive Director of the bi-national Indo-US Science and Technology Forum. He was able to bring a paradigm change in the Indo-American relationship in science, technology and innovation by bridging academic, research and industrial enterprises of both countries. In Aug 2011, Dr. Arabinda Mitra took over the responsibilities of Adviser & Head of International Bilateral Cooperation Division of the Department of Science & Technology, Government of India. This job portfolio involves overseeing India's international science, technology and innovation engagements with nearly 43 countries across the globe.



# Keynote Address : Shri. Girish Shankar Secretary, Department of Heavy Industry, Govt. of India



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**Shri Girish Shankar** IAS (BH 1982) presently posted as Secretary, Department of Official Language, Ministry of Home Affairs is also appointed as Secretary, Department of Heavy Industry, Ministry of Heavy Industries and Public Enterprises till further orders. Shri Girish Shankar is B.Sc.(Hons) and has done his PG Diploma in Business Administration.

He started his Indian bureaucracy career in 1982 as S D O . In his vast service career, he has been Under Secretary - Transport(1986-86), Joint Secretary- Finance (1988-89), Collector & D M — Rohtas (1989-90), Deoghar (1990-91), Collector & D M Dy Secretary (1991-91), MD -Urban Development (1996-98), Commissioner -Darbhanga (1998-99), Secretary- Cabinet Affairs(1999-2000), Secretary -Relief & Rehabilitation Dept (1999-2000), Secretary-Cabinet Affairs(2000-02), Principal Secretary- Panchayati Raj (2010-11) to name a few.

He has served in central cadre as Joint Secretary- Ministry of Consumer Affairs, Food & Public Distribution (2011-12), Additional Secretary-Ministry of Tourism (2012-15), Special Secretary – Ministry of Tourism (2015-15) and Secretary-Ministry of Home Affairs, Department of Official Language(2015-16).



# Dr. Jennifer Dungs

Director, Mobility and Urban Systems Engineering Fraunhofer IAO



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**Dr. Jennifer Dungs** is Director, Mobility and Urban Systems Engineering at Fraunhofer IAO and is responsible for the business segment mobility and city system design.

The Mobility and Urban Systems Engineering (MUSE) business unit works to develop dynamic system solutions geared toward mobility and the cities of the future - design mobility and urban systems for industry and the public sector.

#### Focusing on the following topics:

**Electric vehicle systems:** urban and inter-urban charging infrastructure; shared use of electric vehicles; logistics concepts for electric vehicles; integrated fleet and charging management.

Urban mobility: intermodal trip chaining; ease of mobility; mobility concepts for urban spacest.

The city: Morgenstadt – the city of the future; resilient cities; concepts for the districts of the future.

**Energy:** micro smart grids incorporating electric vehicles; charging containers featuring rapid charge spots, buffer storage and photovoltaic facilities.

**Sharing systems:** technological and organizational solutions that allow goods to be shared; sharing depots; development of products with sharing in mind.



# Prof. Dr.-Ing. habil. Matthias Busse

Director, Fraunhofer IFAM & CEO Fraunhofer Electromobility Forum



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**Prof. Dr. Matthias Busse** is Director for Fraunhofer Systems Research Electromobility and he is well-known as visionary and pioneer in the field of e-mobility. His dedication ranges from promoting technical innovations – e.g., battery technology, development of wheel hub motors, and inductive charging – to future-oriented concepts of society like energy-self-sufficient living. Furthermore, he is Executive Director at Fraunhofer Institute for Manufacturing Technology and Advanced Materials IFAM and holds a chair for Near Net Shape Processes at the Faculty of Production Engineering at the University of Bremen.

Under his direction numerous successful working groups have been founded to push the topic of e-mobility in close cooperation with industry. Professor Busse further fosters the building-up of complete system competence in e-mobility by his position as CEO of the Forum E-mobility, a nation-wide association of industry, science and politics. The respective activities are facilitated by his broad network within the German automotive industry and his support of the 33 Fraunhofer Institutes. He is also actively committed to the development of e-mobility technologies and lightweight construction by his membership in the steering committee of Fraunhofer project centrum Wolfsburg, a cooperation between Volkswagen and Fraunhofer. In this field, Professor Busse can trust on his 10 years experience at Volkswagen Research and Component Production, where he was responsible for Production Technologies and Processes.

Professor Busse is a frequent speaker at national and international events and in his private life, he experiments with energy concepts for autonomous power supply in combination with e-mobility technologies.



## Dr. Andreas Sterzing

Senior Head of the Department Bulk Metal Forming, Fraunhofer IWU



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Dr.-Ing. Andreas Sterzing is the Senior Head of the Department Bulk Metal Forming, Fraunhofer IWU

He graduated in 1995 at the Technische Universität Chemnitz with a diploma degree in Machine Tool Design, and in 2005 he obtained his doctorate in technical sciences.

He started his career as a research engineer at the Fraunhofer Institute for Machine Tools and Forming Technology (IWU). In 2002 he became Group Leader Hydroforming and later Head of Department for Sheet Metal Forming. In 2008 Dr Sterzing was appointed Chief Engineer for Production Technologies. He has coordinated several projects under the Umbrella Theme of "Resource Efficient Production". Currently he is Division Director "Bulk Metal Forming" at the Fraunhofer IWU Chemnitz.

Dr Sterzing has extensively travelled in India among other countries and is at present involved in several projects with a wide range of companies in India both large as well as SME.



#### Mr. Peter Blau

Senior Head of Department, Machine Tools and Automation Fraunhofer Institute For Machine Tools And Forming (IWU)



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Mr. Peter Blau is the Senior Head of Department, Machine Tools and Automation Fraunhofer Institute For Machine Tools And Forming (IWU).

Dipl.-Ing. Peter Blau, born in 1954, studied Mechanical Engineering at Dresden University. At first he worked in the press development from 1977 until 1993 and then he was the leader of the development of the automation department at Umformtechnik ERFURT until 1999.

From 2000 till 2001 he worked at the Fraunhofer IWU as the head of the department Forming Machine Tools. In 2002 he became the director of the division for machine tools and design. Since 2006 he has been the director of the division for machine tools and automation. Since 2013 he has also been the director of the division for machining and removal.



## Dipl. Ing. Michael Matthias

Head of Department Actuators and Sensors, Fraunhofer Institute for Structural Durability and System Reliability LBF



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**Dipl. Ing. Michael Matthias** is the Head of Department Actuators and Sensors, Fraunhofer Institute for Structural Durability and System Reliability LBF.

He field of study was 'Study of Material Sciences' from the University of applied sciences, Osnabrück, Germany.

He has been working with Fraunhofer since 2001. He started as Research Assistant at the Department reliability of active structures, Fraunhofer Institute of Structural Durability, and then became the Deputy Head, Competence Center Mechatronics / Adaptronics at Fraunhofer Institute of Structural Durability and System Reliability, Darmstadt, Germany.

He has also worked at the DLR-Institute of Structural Mechanics, Braunschweig, Germany as a research assistant in the department of Department Adaptronics and Fiber reinforced composites.



### Dr.-Ing. MBA Markus Zeis

Head of EDM, ECM and Waterjet Machining, Fraunhofer Institute for Production Technology (IPT)



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**Dr.-Ing. MBA Markus Zeis** is the Head of EDM, ECM and Waterjet Machining, Fraunhofer Institute for Production Technology IPT

He field of study was on 'Manufacturing Technology' at RWTH Aachen University, with main focus on 'Modeling of the Electrochemical Machining Material Removal Process of Jet Engine Blades'

He also worked as a Team Leader of EDM/ECM Processes at the Laboratory for Machine Tools and Production Technology at the RWTH Aachen University.

Some of his achievents involve –

- Development of the section erosive processes, especially establishing electrochemical machining as a single section
- Projects in practical fundamental research as well as consulting of industrial partners
- Initiation and project acquisition of international research and industrial projects in the field of manufacturing technology (Europe, America, Asia)
- Acquisition, management and execution of development and consulting projects in the field of manufacturing technologies in the sectors jet engines, gas and steam turbines, automotive, medical equipment technology as well as tool and mold manufacturing
- Organization of field specific conferences and seminars for practice related exchange of knowledge and for further education of technology operators
- Publishing of scientific publications and presentation of research results on international conferences



#### Mr. Dattatreya Gaur

Vice President and Head, Business Unit Robert Bosch Engineering and Business Solutions P Ltd.



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Mr.Gaur is passionate about technologies and business. His business unit designs and develops products in diverse domains — automotive electronics, steerings and diagnostics; Industrial automation and smart manufacturing; power tools, security systems, HVAC systems and home appliances. They run three COE for product reliability, NVH (Noise Vibration and Harshness) and Plastics and a User Experience studio for design. For the last two years, he was global program manager at Bosch Germany, rolling out Lean Management in Engineering and Development departments of a large business unit in their centers in Germany, Austria, India and Japan. He is an electronics engineering graduate from MNIT Jaipur and has done an executive management program at IIMB. He has helped many Bosch group companies worldwide in improving their software engineering and development processes based on CMMI framework.

During the last 22 years with Bosch, he has worked and lived in India, Germany and USA. Prior to joining Bosch he had worked for 6 years with BEL (Bharat Electronics) in development of Radar and Sonar systems for ISRO and DRDO.

#### **Key Achievements**

Dattatreya is passionate about technologies and business. His business unit designs and develops products in diverse domains – Industrial automation and smart manufacturing, Automotive electronics, steering and diagnostics; power tools, security systems, HVAC systems and home appliances. They run three COE for product reliability, NVH (Noise Vibration and Harshness) and Plastics and a User Experience studio for design.



# Dr. Ajay Mathur, Director General, The Energy and Resources Institute TERI



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**Dr. Ajay Mathur** is Director General of TERI – The Energy & Resources Institute, and a member of the Prime Minister's Council on Climate Change.

He was Director General of the Bureau of Energy Efficiency in the Government of India from 2006 till February, 2016, and responsible for bringing energy efficiency into our homes, offices, and factories, through initiatives such as the star labelling programme for appliances, the Energy Conservation Building Code, and the Perform, Achieve and Trade programme for energy-intensive industries.

Dr. Mathur was earlier with TERI from 1986 to 2000, and then headed the Climate Change Team of World Bank in Washington DC. He was President of Suzlon Energy Limited, also headed the interim Secretariat of the Green Climate Fund.

He has been a key Indian climate-change negotiator, and was also the Indian spokesperson at the 2015 climate negotiations at Paris. He is a global leader on technological approaches to address climate change; recently, he joined the global group of industrial, financial and think-tank leaders to co-chair an Energy Transitions Commission which will suggest ways for companies and countries to move towards climate-friendly energy futures.



# Mr. Fabian Niedermeyer

Research Associate and PhD Fraunhofer Institute for Wind Energy and Energy System Technology IWES



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Mr. Fabian Niedermeyer is a Research Associate at the Division Systems Engineering and Distribution Grids at Fraunhofer Institute for Wind Energy and Energy System Technology IWES. He received his diploma in Electrical Engineering with focus on Electrical Power Engineering from RWTH Aachen University. His main research interests are grid coupled storage systems and the integration of renewable energy sources into distribution grids. He previously worked as a Research Associate in German Aerospace Center (DLR), Institute of Vehicle Concepts.

#### Some of his publications include:

Innovative performance tests für PV-Speicher Systeme zur Erhöhung der Autarkie und des Eigenverbrauchs Comparison of the Performance of PV battery systems Transparency for the storage market

Test procedures for grid connected residential PV battery systems



#### Dr. Ewa J. Dönitz

Head of Business Unit Foresight for Strategy Development Fraunhofer Institute for System and Innovation Research ISI



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**Dr. Ewa J. Dönitz** has been a senior researcher in the Competence Center Foresight at Fraunhofer ISI since 2009. She is an expert in scenario development and supports colleagues across the Institute in developing scenarios in various thematic areas and leads national and European Foresight projects. Her research is focussing on the whole range of Foresight methods in particular scenarios, visions and roadmaps and its application for underpinning strategy building and innovation processes.

Since June 2013, she has been the head of the Business Unit Foresight for Strategy Development. She is teaching innovation and project management at the Femtec Berlin. In 2011, she was a lecturer for futures research methodology at the University of Kassel.

After having studied economics at the Oskar Lange Economics Academy in Wroclaw (Poland) and economics at the University of Bremen, she worked as a research associate at the Institute for Project Management and Innovation (IPMI) at the University of Bremen and received her PhD with a thesis on advancing the scenario methodology.



### Dr. Clemens Pollerberg

Senior Scientist & Group Manager, Fraunhofer Institute for Environmental, Safety, and Energy Technology UMSICHT



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**Dr Clemens Pollerberg** is senior scientist and group manager of the working group Thermal Components and Systems at the Fraunhofer Institute UMSICHT. He obtained his PhD from the University of Duisburg-Essen and he has been working for Fraunhofer UMSICHT since 2002. His main research activities are thermal energy storage for the cold and heat supply systems and thermally driven chillers for the use of waste heat and solar applications.



# Mr. Vikram Gandotra,

Vice President and Divisional Head Siemens India



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**Vikram Gandotra** is recognised in the Power T&D industry for his work with power utilities in bringing about significant improvements in their operations through introduction of newer technologies. He works at Siemens Ltd, Gurgaon where he heads the Marketing & Strategy group for Digital Grid Business Unit. He has degrees in Electrical Engineering and Business Administration. He has a rich experience covering all areas in the Power Transmission & Distribution domains. He has worked on several projects for improvement of the Distribution networks of Power Distribution Utilities in India and abroad.

He dreams to see the Indian industry play a leading role in the global Smart Grid community and chairs the Smart Grid Division of IEEMA (Indian Electrical & Electronics Manufacturers Association, which has over 800 members). He is a member of several industry groups including the Working group of Training material on Smart Grids for capacity building of Utilities developed under USAID-PACE D. He is also the Secretary of WG 5 - DMS of the 'Power System Control and Associated Communications Sectional Committee, LITD 10 of "Bureau of Indian Standards" and also member in the IEC PC-118 committee for Smart Grid User Interface.



He is a speaker in several national and international conferences and also writes for industry journals.

#### Dr. Mathias Kretschmer

Fraunhofer Institute for Open Communication Systems

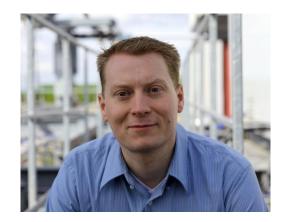


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**Dr. Mathias Kretschmer** holds a Dipl-Ing. degree in communications engineering from the University of Applied Sciences Cologne, Germany and a PhD. degree in Computer Science from Brunel University, United Kingdom. Since 2005 he's with Fraunhofer FOKUS/FIT in Sankt Augustin, Germany where he heads the Network Research (NET) group which focuses on cost-effective solutions to 'Connect the Unconnected' by enabling Internet coverage in rural areas.

For the last six years, the Network Research group at Fraunhofer FOKUS has been developing its carrier-grade broadband backhauling technology WiBACK to push broadband coverage deeper into rural areas. Now, this development continues at FIT, with a strong focus on usability and ease-of-use. The key design goals follow the Global Research Alliance (GRA) theme of 'Inclusive Innovation' to develop good-quality cost-efficient technologies for mass deployments preferring sustainability over the extra few percent of performance.



# Mr. Dhiraj Wali,

Vice President, Robert Bosch Engineering and Business Solutions



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Mr. Dhiraj Wali is the Vice President in Robert Bosch Engineering and Business Solutions effective July, 2012. Prior to that he was the Managing Director of Bosch Chassis Systems India Limited, Pune. Mr. Wali is an engineering professional with around 28 years of work experience. Mr.Wali is convent educated and holds an Engineering Degree (1985) from Regional Engineering College (Kashmir University) in Electronics & Communication stream. He also has completed Robert Bosch Kolleg Executive General Programme from IIM, Bangalore(2012).

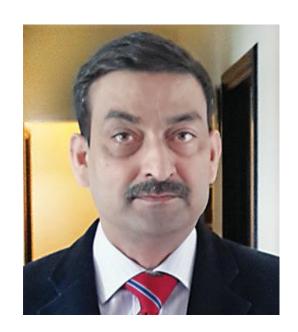
#### Career milestones

March 1986 – March 1988: Started his professional career with HCL Ltd.

March 1988 – Dec 2002: Worked with Philips India @ Delhi and Pune in various business divisions to finally become the General Manager of it's Communication, Security and Imaging business division in India.

January 2003 to Dec 2009: Vice President and Business Head of Bosch Security Systems, India, Bangalore. He has been responsible for setting up Bosch Security Systems business in India. January 2010 to June 2012: Managing Director of Bosch Chassis Systems India Ltd. @ Pune. He was simultaneously also the Regional President India for Business Division of Bosch - Chassis Systems Control.

July 2012 onwards: Joined Robert Engineering and Business Solutions, Bangalore as Vice President. Currently he is responsible for Government Business which includes Smart Cities topic.



# Ms. Clara Tu, M.Sc.



#### International Education Manager Fraunhofer Academy

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Since 2015 Clara Tu is responsible for the international business development of the Fraunhofer Academy, Fraunhofer-Gesellschaft's specialist provider of continuing education and advanced part-time trainings. She coordinates international and national projects with several Fraunhofer Institutes and partner universities and supervises partners in developing international education programs. In addition she is a research associate in a project of the Federal Ministry of Education and Research (BMBF) Germany that supports training concepts such as part-time or dual study courses offered in the field of Energy and Sustainability in alliance between German universities and Fraunhofer Institutes. For this project she developed a market research study about the Indian education market [Tu, 2016]. Furthermore she is responsible for controlling, marketing and international delegations for the Fraunhofer Academy.

From 2011 until 2015 she was working at the School of International Business and Entrepreneurship of the Steinbeis University Berlin in the team of international programs. In October 2013 she became the program manager of all MBA Programs (»Master of Business Administration in General Management« and the »Corporate GlobalMBA«). She was responsible for leading the project of internationalization of the MBA programs in cooperation with the University of California San Diego (USA) and Tsinghua University Beijing (China). As a program manager of MBA programs she supervised (national and international) business mentors, students and lecturers. She also coordinated international education programs with the USA, China, Brazil and India.

Clara Tu holds a Master of Science degree in international management from the Steinbeis University Berlin, Germany as well as a diploma in Business Administration of the Technical University of Applied Sciences Regensburg, Germany. Her research focus during her diploma studies was already focused on India; final thesis: »India's country profile - market potential and risks for German companies, 2011«). During her studies she also worked for DERTOUR UK and Rist Consulting Ltd. in London, UK.



#### Ms. Telsche Nielsen



Research Associate, Fraunhofer Institute for Wind Energy and Energy System Technology (IWES)

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**Ms. Telsche Nielsen** is a Project Development and Management in the field of Professional Training and a Research Associate at the Fraunhofer Institute for Wind Energy and Energy System Technology (IWES)

She is a Project Leader for the Development of the Online M.Sc. Wind Energy Systems in Cooperation with the University of Kassel and for the Development of a Bachelor of Science in Wind Energy in Cooperation with the University of Applied Sciences in Bremerhaven. She is involved in developing and Managing International Training Courses in Wind Energy for Chinese WEC Manufactures and research Focus: Problem Oriented Knowledge Transfer and Online

Ms. Nielsen has completed full time studies in Physics, Mathematics and Education, at the Carl von Ossietzky University of Oldenburg and the Albert-Ludwigs- University of Freiburg



#### Ms. Jutta Haubenreich

Project Manager and Head of Communication and Marketing Fraunhofer Academy



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**Jutta Haubenreich** is responsible for a 2.7 Mio project funded by the Federal Ministry of Education and Research (BMBF) Germany that supports training concepts such as part-time or dual study courses respectively study modules or certificate offers in the field of Energy and Sustainability in alliance between German Universities and Fraunhofer Institutes.

She is also responsible for program management of continuing education programs with several Fraunhofer Institutes, also with the focus on »Energy and Sustainability«.

Furthermore she is head of online communication and online marketing in the Academy's education management team.

Ms Haubenreich studied communication science and media research at the Ludwig Maximilian University of Munich between 2004 and 2009, subsequently completing a Master of Arts in market and media research. Ms Haubenreich also acquired extensive experience in continuing education and vocational training during the two years she spent working at Siemens Professional Education. She joined the Fraunhofer Academy in 2009.



### Mr. Damian Wagner

Coordinator Smart Cities, Fraunhofer Institute for Industrial Engineering IAO



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Damian Wagner is coordinator of the Smart Cities Initiative and the European Smart City Project Triangulum at the Fraunhofer Institute for Industrial Engineering IAO in Stuttgart, Germany. He gained hands-on experience in the field of sustainable and innovative energy solutions and financing while working as Senior Project Manager in the Innovation Management team of badenova, a leading German utility, as well as during his time with the International Emissions Trading Association (IETA) in Brussels and in his work as freelance consultant. The focus of his studies at ESB Business School in Reutlingen, in Barcelona and at the University of Exeter was on Carbon Finance and Renewable Energy Finance Mechanisms. He put this knowledge into practice in the South of Germany, where his family's project management firm operates several innovative small hydropower plants.

