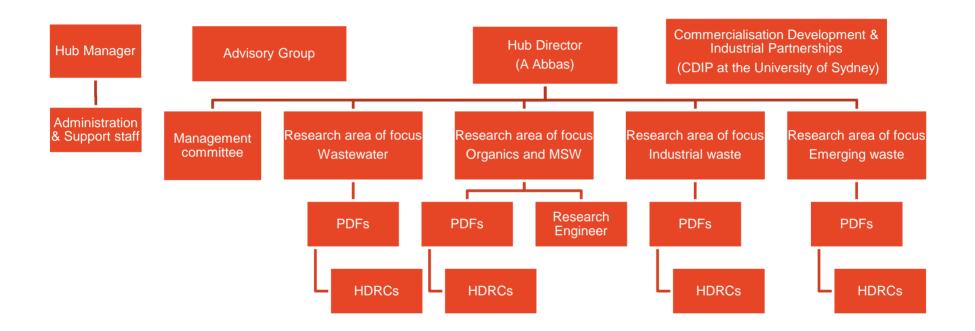


# **Organisation Structure**



**CDIP:** Commercialisation development and industrial partnerships **PDF:** Postdoctoral fellow **HDRC:** Higher degree by research candidate



## **Manaagement Commitee**

#### Associate Professor Ali Abbas

Hub Director and Associate Professor The University of Sydney

Ali is Associate Professor and SOAR Fellow at the University of Sydney in the School of Chemical and Biomolecular Engineering. He is the founder and director of the Laboratory for Multiscale Systems and is Director of the Waste Transformation Research Hub, a national centre aimed at addressing the waste industry's research and technological challenges.

Ali received both his Bachelors and PhD in Chemical Engineering from the University of Sydney, Australia. He held academic appointments at Nanyang Technological University (NTU), and UNSW Asia in Singapore before returning, in 2007, to the University of Sydney.

His engineering research and expertise is in the area of Process Systems Engineering with applications to Clean Energy and biotechnology systems. He conducts fundamental computational and applied research with emphasis on multi-scale systems resource optimisation and efficiency. Ali is the recipient of multiple awards including the Australia-Harvard Fellowship 2011 as well as the Academy of Technological Sciences and Engineering (ATSE) Fellowship 2012 (Australia-China Future Leader in Clean Coal Technologies). In 2008, A/Prof. Abbas was awarded the PSE Model-based innovation prize (London, UK) recognising his work in model-based optimal process operations, and received the same award as runner-up in 2015. Recently he received the inaugural Sydney Research Accelerator (SOAR) fellowship for University's most talented researchers in recognition of research leadership

### **Dr Nick Florin**

Director (Resource Futures) at ISF UTS

Nick is Research Director at the Institute for Sustainable Futures at the University of Technology Sydney. He is the Director of the Resource Futures Research Area and is the Deputy Director of the Wealth from Waste Research Cluster, a collaboration with CSIRO, University of Queensland, Monash, Swinburne and Yale, working on developing new pathways for creating wealth from waste, including e-waste. Nick's university and industrial research experience focuses on mitigating adverse environmental impacts from resource production and use. His work has contributed to new technology development and deployment, policy and strategy, and stakeholder action towards sustainable futures spanning waste, energy and emission-intensive industrial sectors.







## Professor Damien Giurco

Director (Innovation) at ISF UTS

Damien Giurco is Professor of Resource Futures and Director (Innovation) at the Institute for Sustainable Futures, University of Technology Sydney. His work with government and industry focuses on resource stewardship and he directs the Wealth from Waste Cluster, a collaborative research program supporting circular economy pathways and policies for metals. He is Editor-in-Chief for the journal Resources and serves on the NSW Container Deposit Scheme Ministerial Advisory Committee

## Professor Tim Langrish

The University of Sydney

Tim Langrish is a Professor of Chemical and Biomolecular Engineering at the University of Sydney, where his research interests are in the areas of process technology, particularly drying technology, food process engineering and particle processing and production. He is one of the world's leading spray drying researchers, and he co-edited the drying chapter for Perry and Green's Handbook of Chemical Engineering.

He has done research in the application of Computational Fluid Dynamics to drying problems involving spray drying and timber processing, and he has also produced optimized drying schedules for softwood and hardwood timber, in collaboration with timber processing companies and organizations. He graduated with honours in Chemical and Process Engineering from the University of Canterbury in 1985 and with a D.Phil. from Balliol College, Oxford, in 1989.

### Dr John Lear

Principal consultant JBL Consulting

PhD Chemical Engineer with expertise in Process Technology, Control Systems and Risk Assessment, particularly in the safety of Programmable Electronic Systems.

John is currently Principal Consultant at JBL Consulting has more than 30 years' experience in process plant design, operation, R&D and technology management.

## Dr Alejandro Montoya

The University of Sydney

Dr. Montoya completed his Ph.D in Chemical Sciences in 2002 at the Universidad de Antioquia -Colombia. He received the prestigious Sesqui Postdoctoral Fellowship from the University of Sydney (2004 -2007). He joined the School of Chemical and Biomolecular Engineering at the University of Sydney as a lecturer in 2007 and was promoted to Senior Lecturer in 2010. Dr. Montoya has been a visiting scholar at Tsinghua University (INNET), and the University of Utah (Department of Chemistry and the Department of Chemistry and Fuel Engineering).











### **Dr Gordon Weiss**

Principal Consultant and Associate Energetics

Dr Gordon Weiss has been a Principal Consultant and Associate for more than 15 years with Energetics. He is also an Honorary Associate with the School of Chemical and Biomolecular Engineering, Sydney University.

Gordon's particular expertise lies in energy and carbon policy development, renewable energy technologies and energy management in the resources sector. He has worked with a number of governments on the development of energy and greenhouse gas programs and policies, and is arguably one of Australia's leading forecasters of emissions reduction trajectories.

Gordon provides technical assessments for a variety of clean energy technologies including large scale solar PV, bioenergy and geothermal energy. Since joining Energetics he has worked in all areas of energy management, process improvement and greenhouse management, with a prime focus on delivering savings to clients by aligning operating systems with manufacturing strategies. Gordon's experience with private sector has included energy assessments of large facilities in the resource sector, including upstream oil and gas, iron ore mining, coal mining, underground metal ore mining, and minerals processing (alumina, lead and zinc, iron and steel, manganese).

Gordon has a PhD in Chemical Engineering and is a Fellow of the Institution of Chemical Engineers (IchemE) in Australia, having been on the Board for the past seven years. For 12 months he was on the IchemE's Global Council. He chaired the Steering Group for the Warren Centre's Industrial Energy Efficiency Project and is on the Standards Australia EM001 Energy Auditing Technical Panel.

## Professor Dianne Wiley (Head of School)

School of Chemical and Biomolecular Engineering The University of Sydney

Professor Dianne Wiley is currently the Head of School of Chemical and Biomolecular Engineering at the University of Sydney in Australia. Prior to joining the University of Sydney she was the Capture Program Manager and Economics Leader for CO2CrC. She has also previously held posts at UNSW as Senior Associate Dean for Graduate Research and Acting Dean for the Faculty of Engineering. She is an international expert in the design and optimization of membrane systems for water and wastewater treatment and also in assessment of technologies across the carbon capture and storage chain. She is a Fellow of Engineers Australia, the Institution of Chemical Engineers, the Royal Australian Chemical Institute and also a member of the Institute of Public Administration Australia.







# Advisory Board

Dr Ron Wainberg (Advisory Group Chair) Technical Director MRA Consulting Group

Ron Wainberg has developed key skills in the field of solid waste management and has over 30 years' experience in both project and contract management gained in Europe, Asia and Australia. He is a consultant with a particular interest in resource recovery from waste materials, the development of practical waste management strategies, and how processing technology can be successfully applied to recover resources from wastes. Ron is Technical Director at MRA Consulting where he leads a number of projects as well as providing technical support and quality reviews for others. He has previously served as the Waste Advisory Team Leader and subsequently Technical Director for Waste at Hyder Consulting in Sydney where he was involved in a significant number of studies in the waste sector. From 2009 until 2013, Ron served as the National President of the Waste Management Association of Australia. Ron's experience in Solid Waste Management is built on the strong foundation of experience gained in engineering design, project management and business development in the process control, petrochemical and other industries.



## Professor Susan Pond

Director of the AINST The University of Sydney

Professor Susan Pond AM, FTSE FAHMS is a senior leader in business and academia, recognized for her national and international contributions to medicine, biotechnology and renewable energy. Currently, Susan Is Director of the Australian Institute for Nanoscale Science and Technology at the University of Sydney, Chair of the New South Wales Smart Sensing Network, Director of Biotron Ltd, Vectus Biosystems Ltd and the Wound Management Innovation Cooperative Research Centre, and Chair of the Australian Institute for Bioengineering and Nanotechnology Advisory Committee at the University of Queensland.

### Mr Steve Beaman

Director Waste & Resource Recovery NSW Environment Protection Authority

Steve co-ordinates and delivers waste policy, reform, compliance and programs in NSW, including the delivery of the NSW Government's \$465 million Waste Less Recycle More initiative, the largest waste and recycling funding program in Australia. Funded through the NSW waste levy, Waste Less, Recycle More includes a massive investment in new infrastructure to lift recycling rates, community education and engagement strategies, actions to tackle litter and illegal dumping and targeted inspection, compliance and enforcement initiatives.







Steve has worked at the Department since 1995 in a number of key roles including Director Executive Services, Manager Waste Operations and Manager Forestry

#### Mr Andrew Lawson

Managing Director MBD Energy

Andrew is a qualified Civil Engineer with twenty-five years' experience in the public and private sectors in Australia.

For the last 15 years he has held senior management roles across a number of major civil engineering infrastructure projects throughout Australia. Andrew has a thorough understanding of project development, management and construction processes to deliver multi-million dollar projects. Over the past 5 years Andrew has managed a variety of projects in Australia and the UAE.

Andrew has been involved in MBD since its inception in 2006. In his role as Managing Director, Andrew has been responsible for the development of MBD to a multi-faceted environmental company whose technology provides the potential to remediate waterways across a wide range of industries and applications and produces a range of high value products for global application. Under Andrew's direction, MBD has pursued a strategy of integration with industry partners in Australia and Internationally. Having a strong base of R&D development MBD is now in the process of commercialising its technology in Australia, Thailand and China.

Andrew has built a strong team that contains considerable depth of technical and financial experience to design, build, own and operate profitable algae based energy projects. Prior to MBD, he held senior management roles across a number of major infrastructure projects throughout Australia and internationally. Andrew has a thorough understanding of project

#### Mr Steve Rogers

Business Development Manager Licella

Steve Rogers has spent most of the last twenty years establishing new technology companies and developing them to be commercially successful operations.

Steve joined Licella in early 2008 initially focussing on the opportunities for the technology in Europe, then assisting with capital raising whilst developing the commercialisation strategy for the company which is now being implemented.

Prior to Licella, Steve has had a successful career commercialising technologies in the software and CleanTech sectors. After 10 years with IBM, he joined the fledgling Software Industry and moved to Australia in 1989 to establish BMC Software which now has annual turnover of over \$100m. Since this time Steve has been involved in two successful CleanTech start ups Energy Efficiency Ltd in the UK







and Horizon Technologies in Australia who were the first organisation to receive Australian Government funding via the CVC Reef programme.

#### Professor Veena Sahajwalla Director of SMaRT@UNSW UNSW

Scientia Professor Veena Sahajwalla is the Director of SMaRT Centre (Sustainable Materials Research & Technology) and Associate Dean (Strategic Industry Relations) faculty of Science, UNSW. Her research interests include sustainability of materials and processes with emphasis on environmental benefits. She invented an environmentally friendly process for recycling plastics and rubber tyres in electric arc furnace steelmaking. She is an international award winning engineer. In 2012 she was named Overall Winner of the Australian Innovation Challenge Award. She was awarded the 2012 Banksia Award, the GE Eco Innovation Award and the 2005 Eureka Prize for Scientific Research. She has established excellent working relationships with national and international organisations. She was an ARC- Future Fellow and a long-serving judge on ABC television's The New inventors.



#### Mr David Singh

Managing Director Re.Group

David Singh is an industry veteran with over 18 years' experience in the waste recycling industry in Australia, the UK and Asia. He was integrally involved in the development of the UR-3R Process, along with the overall development and financing of the Eastern Creek UR-3R Facility in Sydney – the largest AWT facility in the Southern hemisphere. Subsequently, he led Global Renewables' successful bid and implementation of the US\$4B Lancashire Waste PFI Contract, with a processing capacity of up to 600,000tpa of waste and recycling. In 2009, David became an owner, director and CEO of Global Renewables (owner and operator of the Eastern Creek UR-3R Facility). In 2013, he co-founded Re.Group a company dedicated to delivering recycling services for all manners of household waste.

David has a background in mechanical engineering and holds a B.Eng, an MBA and a graduate diploma in finance. In addition to leading Re.Group, David is the nonexecutive Chairman of Global Renewables and sits on the boards of the Australian Council of Recycling and Sustainable Business Australia.





## Adj. Assoc. Professor Don White

The University of Sydney

Don White has thirty years' experience as a manager and engineer and in manufacturing and engineering in the process and chemical industries. During this time he was also actively involved in nature conservation, environment protection and community issues. During the last eighteen years he has brought his industrial experience to bear on conservation issues - particularly by being active in the Nature Conservation Council (NSW) (the peak body for non-government environmental organisations in NSW) currently as it Chairperson (from 2005 – date) and member of several of its internal committees.

Don is also an Adjunct Associate Professor at The University of Sydney where he has been involved in teaching and supervising final year students in the Engineering Faculty since 1999. He focusses on Professional and Project Engineering, Risk Management and the coordination of major design projects. Don has also consulted to the Petrochemical, Chlor-alkalai, Chemical and Magnesium metal industries and particularly around issues concerning environmental protection and contaminated lands remediation.

Don is a member of the NSW Environmental Trust Board (from 2017) and was a member of the EPA (Environmental Protection Authority NSW) Board from 2007 until 2012. He serves and has served on a number of Government committees involved with Waste issues.

Don contributes in local affairs through his organisation of a local resident and Neighbourhood Watch group, a member of the Community Safety Committee, and is an active member of the Rural Fire Service in the Laguna Brigade in the Hunter Valley Since partial "retirement" in 1998 Don has become increasingly involved in the education of engineering students and the results of his contributions at Sydney University were recognised by his appointment to the role of Adjunct A/Professor in 2003. He was elected to be a Fellow of the Institution of Chemical Engineers in 2005.



Waste Transformation Research Hub

