Dr. Pradeep Haldar
phaldar@usf.edu

SUMMARY

Dr. Pradeep Haldar is Adjunct Professor at the Patel College of Global Sustainability and a Fulbright Scholar. He currently serves as President at Halovation, a Management and Technology Consulting organization for Energy, Semiconductor and Materials Technology based in the Tampa Bay Area. He previously served in multiple roles, with increasing responsibility, in industry and academia that included: President and Chief Operating Officer of Dais Corporation, a publicly traded company providing nanotechnology products for energy, air and water industries located in Tampa Bay, Florida; Vice President of Entrepreneurship, Innovation and Clean Energy Programs at the Colleges of Nanoscale Science and Engineering (CNSE) at State University of New York, University at Albany, New York (now SUNY Poly); Chief Operating and Technical Officer of the U.S. Photovoltaic Manufacturing Consortium (USPVMC) in partnership with SEMATECH; Professor and Head of NanoEconomics and NanoEngineering at CNSE; and Director of the Energy and Environmental Technology Applications Center at CNSE. Prior to joining SUNY, Dr. Haldar founded and served as General Manager and Director of Technology, of rapidly growing SuperPower (now part of Furukawa), a start-up and new spin-out subsidiary of Intermagnetics (now Philips).

Dr. Pradeep Haldar has extensive experience in business development, strategic planning, research and development, economic outreach, public-private partnerships, financial and operations management, innovation and technology commercialization. Dr. Haldar has successfully negotiated agreements and strategic alliances with industry and university collaborators, suppliers, national laboratories and government agencies in Asia, Europe and the U.S. He has a strong record of executive leadership with 30+ years of know-how in creating and rapidly growing interdisciplinary high-performance organizations in energy, semiconductor, medical devices, nanotechnology industry sectors. He has demonstrated capabilities in identifying emerging opportunities, in implementing strategic plans, creating technology roadmaps and has raised over $200M in funding. Dr. Haldar supported the spin-off/start-up of multiple technologies and companies. He has consulted for private companies, investor organizations and provided service to review panels, state and federal agencies. He has proactively provided professional development support, advise and mentoring to faculty, students and colleagues.

He is an author or co-author of over 200 reviewed papers, conference proceedings with ten patents issued or pending, and a senior member of IEEE. He recently received the Fulbright Scholar Award, is a Fellow of the Institute of Physics and recipient of the President's Excellence in Research award as well as the Business Review's Technology Award for Energy/Sustainability. He has his Ph.D. from Northeastern University and an MBA from Rensselaer Polytechnic Institute.

EARNED DEGREES

1997-99	**Rensselaer Polytechnic Institute, Troy, NY** Executive MBA
1984-88	**Northeastern University, Boston, MA** Ph.D., Materials Science & Engineering and Solid State Chemistry
1979-84	**Indian Institute of Technology, BHU, Varanasi, India** B.Tech., Metallurgical Engineering

EMPLOYMENT BACKGROUND

2019 – Present	**University of South Florida, Patel College of Global Sustainability, Tampa, FL** *Adjunct Professor*
2019 – Present	**Halovation: Management and Technology Consultants, Tampa, Florida** *President and Principal - Technology/Energy/Materials/Semiconductors*
2019 – Present	**U.S. Department of State, Coimbatore, India** *Fulbright Scholar (2019 – 2021)*
2018 – 2019	**Dais Corporation, Odessa, FL** *President/Chief Operating Officer*
2001 – 2019	**UNIVERSITY AT ALBANY (now SUNY Polytechnic Institute) Colleges of Nanoscale Science & Engineering (CNSE), Albany NanoTech Complex, State University of New York (SUNY), Albany, NY**
2010 – 2019	**Colleges of Nanoscale Science & Engineering,** **SUNY Poly (previously University at Albany), Albany, NY** *Vice President of Entrepreneurship, Innovation and Clean Energy Programs; Professor (Retired).*
2014- 2017	**College of Nanoscale Engineering and Technology Innovation,** **SUNY Poly (previously University at Albany), Albany, NY** *Interim Dean; Head of NanoEngineering; Head of NanoEconomics; Professor*
2011 – 2017	**U.S. Photovoltaic Consortium (PVMC), CNSE/RF of SUNY, Albany, NY** *Chief Operating and Technology Officer; Principal Investigator, Founder, Board Member*
2001 – 2017	**Energy and Environmental Technology Applications Center,** **SUNY Poly and University at Albany, SUNY, Albany, NY** *Director*
2001 - 2010	**College of Nanoscale Science & Engineering,** **University at Albany, SUNY, Albany, NY** *Professor and Head, Nanoengineering Constellation*

2001 – 2018 **MANAGEMENT & TECHNOLOGY CONSULTANT, Albany, NY**
Advisor for Technology | Energy | Materials | Semiconductor Industries

1990 – 2001 **INTERMAGNETICS (now PHILIPS), Latham, New York**

2000 – 2001 **IGC-SuperPower (now Philips), Schenectady, NY**
Founder, Director of Technology and General Manager

1996 – 1999 **Intermagnetics General Corporation (now Philips), Latham, NY**
Manager and Head, Technology Development Organization

1990 – 1995 **Intermagnetics General Corporation (GE spin-off), Latham, NY**
Senior Engineer and Project Manager, High Temperature Superconductor Group

1988 – 1990 **Johnson Matthey Electronics (now Honeywell), Spokane, WA**
Development Engineer, Research & Development Group

1984 – 1988 **Northeastern University (Barnett Institute), Boston, MA**
Research & Teaching Assistant
Thesis Advisor: Professor Bill C. Giessen

1986 **Energy Materials Corporation, South Lancaster, MA**
Engineering Intern

AWARDS/APPOINTMENTS

2019 - Present	Fulbright Scholar Award (2019-2021), *US Department of State*
2018	Guest of Honor, *Indo-US Bilateral Workshop on Nanotechnology for clean energy generation and storage & NanoChallenge*, PSG IAS, Coimbatore, India
2018 - Present	Advisory Board, *SeedSprint – Technology Commercialization*, New York, NY
2017	Business Review *Technology Award for Energy/Sustainability*, Albany, NY
2017	Certificate of *Special U.S. Congressional Recognition* by Paul Tonko, Albany, NY
2016	Guest of Honor, Indian Student Organization, *University at Albany, SUNY*, Albany NY
2014 - Present	Distinguished Visiting Professor, *PSG College of Technology*, Coimbatore, India
2014 - 2018	Executive Advisory Board/Judge, *NY Tech Valley First Robotics Competition*
2014 - 2016	Chair, Board of Trustees, *Academy of Holy Names, Albany, NY*
2014 - 2017	Board Chair, *Children's Museum of Science & Technology*
2013	Distinguished Alumnus Award, *IIT (BHU) Varanasi*
2013 - 2019	Board Member, *Albany Symphony Orchestra*
2011 - 2017	Board Member, *U.S. Photovoltaic Manufacturing Consortium*
2011 - 2016	Board of Trustees, *Academy of Holy Names, Albany, NY*
2011	Board of Directors, *Technology Transfer Society*
2010 - 2012	Director, New York *Partnerships for Innovation* and *Clean Energy Incubator Programs*
2010	Founder, *Center for Intelligent Power*, in Partnership with CG Power 2010
2010	*MIT Clean Energy Prize*, Judging Team, 2010
2010	Judge: New York Academy of Sciences *Blavatnik Awards for Young Scientists* 2010
2010	Review Panelist, *President's Council of Advisors for Science & Technology,* to review the National Nanotechnology Initiative

2009	*Renewable Energy Task Force* for New York Legislator's Energy Committee
2009	Judge: New York Academy of Sciences *Blavatnik Awards for Young Scientists* 2009
2009 - 2010	Governance Committee, New York – *Battery and Energy Storage Technology Consortium*
2009 - 2018	Advisory Board Member, *Magnolia Solar,* Massachusetts
2008 - 2016	Advisor for Technology Due Diligence, *Salem Financial*, New York
2008	President's Excellence in Research Award, *University at Albany, SUNY*
2008	Advisor, New York City Economic Development Corporation Green Sector Study
2008	Consultant, solar industry due diligence *Interlachen Capital Group*, Minnesota
2008	Judge: New York Academy of Sciences *Blavatnik Awards for Young Scientists* 2008
2007	Co-Founder, *National Institute of Sustainable Energy*, with Einhorn Yaffee and Prescott Architecture & Engineering
2007	Emerging Technology and Renewables Committee, *PowerGen International*
2007	Coordinator, *Solar Initiative of New York*, in partnership with NYSEIA
2007 – 2018	Senior Member, *Institute of Electrical and Electronics Engineers*
2006 – Present	Technical Advisory Board Member, *Earthrise Capital*
2006 – 2008	Chair, *U.S. DOE NREL's Clean Energy Alliance (CEA)*
2003 – 2007	Board Member, *Coalition for Commercial Applications of Superconductivity (CCAS)*
2002 – 2017	Founder, Board Member and Executive Director, *New Energy New York* (NENY) Consortium
2002 – 2010	Advisory Board, Annual *Clean Energy Industry Growth Forum*
2006	Nominated by NYSTAR for U.S. Department of Energy's *Orlando Lawrence Award*
2006	Finalist, Small Times *Innovator of the Year Award*
2005 – 2006	Vice Chair, *U.S. DOE's Clean Energy Alliance (CEA)*
2005	Promising Inventor Award, *The Research Foundation, SUNY*
2005	Co-founder, *New York Fuel Cell Network (NYFCN)*
2005	MIKE Award, *Albany-Colonie Chamber of Commerc*e with Albany NanoTech Executive team
2004 – 2005	Coordinator, State Vision and *Roadmap for the Hydrogen Economy*
2004	Founder, *NY Loves Energy Initiative*
2004	Member, Technology Council of the *Center for Economic Growth (CEG)*
2003 – 2004	Coordinator, *New York State Superconductor Outreach* Program
2002 – 2005	Advisory Board, *Inverters Unlimited, Inc (IUI).*
2002	*Business Review* 40 under forty award
2002	Expert Witness for the *US Patent and Trademark Office (USPTO)*
2001	Fellow, *Institute of Physics (IoP)*
2001	*The Metallurgical Society (TMS)* – Structural Materials Division & Electronic, Magnetic & Photonic Materials Division, Exemplary Service as Chairperson
2000 – 2004	Editorial Board, Superconductor Science and Technology
2000	*The Metallurgical Society (TMS)* – Certificate of Recognition for Services to Society
1996 – 2000	Industrial Oversight Committee Member for the *U.S. DOE National Lab's* Superconductivity programs
1994 – 2000	Regularly Rated 1st or 2nd place in *U.S. DOE's Annual Peer Review for the Superconductivity Program* in Materials and Applications Development
1994	*Materials Research Society* – Recognition for Service to Society
1992 – 1993	*Oxford* Who's Who in Engineering Professionals
1989 – 1999	*Marquis* Who's Who in Science and Engineering
1989	*Johnson Matthey* Research Award
1988	*Johnson Matthey* Quality Award (R&D)
1988	*Gustel Giessen* Research Award

PROFESSIONAL AFFILIATIONS

2008 – 2017	Member, The New York Academy of Sciences
2004 – 2018	Member, The American Institute of Aeronautics and Astronautics (AIAA)
2000 – 2018	Senior Member, Institute of Electric and Electronics Engineers (IEEE)
2000 – 2006	Member, Institute of Electric and Electronics Engineers (IEEE)
1994 – 2005	Fellow, Member, Institute of Physics, UK (IOP)
1992 – 2000	Member, The Metallurgical Society (TMS)
1988 – 2002	Member, Materials Research Society (MRS)
1988 – 1996	Member, The American Association for the Advancement of Science (AAAS)

SELECTED RESEARCH ACHIEVEMENTS

Summary of Achievements:

- ***Output:*** Over 212 publications in premier journals and conference proceedings; 4 book chapters; over 190 invited or contributed talks across the U.S, Europe, and Asia. h-Index 35 (Google Scholar). 10 US patents and disclosures.

- ***Students:*** 19 M.S. students advised; 13 Ph.D. students advised.

- ***Selected Awards:*** Fellow, Institute of Physics (2001); Promising Inventor Award, The Research Foundation, SUNY (2005); President's Excellence in Research Award, University at Albany, SUNY (2008); Distinguished Alumnus Award IIT BHU Varanasi (2013); Business Review Technology Award for Energy/Sustainability (2017); Fulbright Scholar (2019).

- ***Selected Invited Keynotes & Plenaries:*** 2009 Mid Atlantic MEMS Alliance Symposium Washington D.C. (Keynote); 2011 US-Japan Workshop on Nanotechnology, Japan (Keynote); 2012 Department of Energy Distinguished Lecture, Washington D.C.; 2012 SEMI North American PV Fab Managers Forum, California; 2012 Conference on Advanced NanoMaterials, India (Keynote); 2012 National Clean Energy Workforce Education Conference, New York (Plenary); 2013 IEEE PVMC Florida (Plenary) 2013 SolarCon, India (Keynote Speaker).

RESEARCH GRANTS AWARDED

Funding Summary (as of 2018):

- Approximately $186M+ funding raised as PI at University at Albany, SUNY Polytechnic Institute and Intermagnetics out of ~$202M overall (including collaboration with others and roles as co-PI). Successfully attracted funding from U.S. gov't (e.g. DOE, DOD, NASA, NSF), industrial consortia (e.g., PVMC, NY-PEMC, NY-BEST), New York State (NYSERDA, ESD, NYSTAR) and direct industrial support (e.g., National Grid, SoloPower Systems, Global Solar Energy, General Electric etc.).

- Founding PI, COO and CTO of the US Photovoltaic Manufacturing Consortium (PVMC) in 2011. Successfully managed a multi-industry and multi-university consortium led by CNSE addressing next-generation Solar PV thin film manufacturing technologies. $62.5M over 5 years.

RESEARCH AREAS

Research and Development:

- Advanced Photovoltaics
- Advanced Fuel Cells
- Next Generation Superconductors
- Electrical Double Layer Capacitors
- Energy Efficiency
- Water Treatment
- NanoTechnology
- Advanced Materials
- Semiconductors
- Medical Devices

Education & Outreach:

- New Energy Consortium
- Energy Forums (TVEF)
- Hydrogen Energy Roadmap
- Solar Roadmap
- Zero Energy Nano (ZEN) Facility and Alternate Energy Test Farm
- Energy Sustainability and Policy

Business Acceleration:

- iCLEAN Incubator
- Technology Acceleration
- Market Validation
- Economic Development
- Technology Entrepreneurship and Innovation

ACADEMIC COURSES TAUGHT

IDS 6938	Energy and Resources: Policy, Society and Innovation
NENG 423	Renewable and Alternate Energy Nanotechnologies
NNSE 664	Innovation and Entrepreneurship in Nanotechnology
NNSE 565	Managing the Adoption of Technology Innovation
NSCI 101	Survey of Nanotechnology; Energy Applications
CNSE 519	Principles of Materials Nanoengineering
CNSE 695	Introduction to Research Programs
CNSE 680	Seminar in Nanosciences
CNSE 756	Nanomaterials for Nanotechnology
CNSE 731	Current Topics in Materials and Architectures
CNSE 810	Research in Nanosciences
SNNE 784	Special Topics in Nanosciences
SNNE 818	Research in Nanomaterials

OTHER STUDENT LECTURES

2020	Improving your Research Process: to Ph.D. Scholars at PSG-IAS, Coimbatore, India
2019	Innovation in Nanotechnology: Breakthrough Technology and Emerging Markets, PSG-iTECH, EE and ECE students, Coimbatore, India
2019	Exit Strategy for Private Entities: Management Buy-Out, USF, Tampa, Florida
2014	Law and Entrepreneurship (with Albany Law), Marketing Strategies, Albany, New York
2014	Research to Business – sharing of experiences, PSG Tech University, Coimbatore, India
2012	Clean Tech and Innovation Lectures, PSG Tech University, Coimbatore, India
2008	Clean Energy Technologies, G3, MBA Program, School of Business, University at Albany
2006	Educating the Workforce for the New NanoTechnology Industry, IIT Delhi, India
2006	The Business of NanoTechnology, Leboeuf Lamb Program on NanoTech Issues
2006	Superconductivity Opportunities, Lecture at Rensselaer Polytechnic Institute
2006	Management of NanoTechnology, Lecture at the School of Business, University at Albany as part of Operations Management Course for the Zurich MBA program
2005	Management of NanoTechnology, Lecture at the School of Business, University at Albany as part of Operations Management Course
2004	Future Prospects of Superconductivity, Lecture at Rensselaer Polytechnic Institute
2001	Superconductivity, General Electric and Intermagnetics, Lecture at Rensselaer Polytechnic Institute