RESUME

1. Name: GAUTAM PODDAR

2. Organization: Indian Institute of Technology, Kharagpur,

3. Educational Qualification:

Degree	Specialization	Institution	Year
BE	Electrical Engineering	Bengal Engineering College, Calcutta University	1992
M.Tech	Power Electronics and Drives	Indian Institute of Technology, Kharagpur	1994
PhD	Electrical Engineering	Indian Institute of Science, Bangalore	2002

4. PhD Guidance:

- Dr. Subhajit Mukherjee
- Dr. Malaya Kumar Sahu

5. Paper Published (last 10 years)

Journal

- Aneesh Kumar A S., Gautam Poddar, P. Ganesan, 'Control Strategy to Naturally Balance Hybrid Converters for Variable Speed Medium Voltage Drives Applications', IEEE Transaction on Industrial Electronics, Volume: 62, Issue: 2, Publication Year: 2015, Page(s): 866 – 876.
- Malaya Sahu, Gautam Poddar, 'Transformerless Hybrid Topology for Medium-Voltage Reactive-Power Compensation', IEEE Transactions on Power Electronics, VOL. 26, NO.5, May 2011
- S.Mukherjee, G. Poddar, 'Direct torque control of squirrel cage induction motor for optimum current ripple using three-level inverter', IEE, Power Electronics, Nov.-Dec., 2010, Vol.3, Issu.6, pp. 904-914.
- Suvajit Mukherjee, Gautam Poddar, 'A Series-Connected Three-Level Inverter Topology for Medium-Voltage Squirrel-Cage Motor Drive Applications', for the Transaction of IEEE Industrial Applications, Jan/Feb 2010, Vol. 46, No.1.
- Gautam Poddar, Malaya Sahu, 'Natural Harmonic Elimination of Square Wave Inverter for Medium Voltage Application', for the IEEE Transactions on Power Electronics, VOL. 24, NO. 5, MAY 2009
- Suvajit Mukherjee, Gautam Poddar, 'Fast Control of Filter for Sensorless Vector Control SQIM Drive with Sinusoidal Motor Voltage', Special issue on 'Electric Machinery & Adjustable Speed Motor Drives' for the Transaction of IEEE Industrial Electronics, October 2007, Vol. 54, No.5.
- Gautam Poddar, V.T. Ranganathan, 'Sensorless Double Inverter Fed Wound Rotor Induction Machine Drive', Special issue on 'Sensorless Control of AC Machines' for the Transaction of IEEE Industrial Electronics, February 2006, Vol. 53, No.1.

Conference

- Sudeep Kumar, R.; Ganesan, P.; Poddar, G., 'Bus paralleling controller with CAN interface for High Power Converter modules', IEEE International Conference on Sustainable Energy Technologies (ICSET), 2010, Candi, Srilanka on December 6-9, 2010.
- Suvajit Mukherjee, Gautam Poddar, 'A Series Connected Three-Level Inverter Topology For Medium Voltage Squirrel Cage Motor Drive Applications', IEEE IAS 2008 Annual Meeting in Edmonton, Alberta, Canada on October 5-9, 2008.

7. Professional / Teaching Experience (Last 5 positions)

Organization	Position	Period
Department of Electrical Engineering, Indian Institute of Technology, Kharagpur.	Associate Professor	2008 - till date
Department of Electrical Engineering, Indian Institute of Technology, Kharagpur.	Assistant Professor	2004 – 2008
Centre for Development of Advanced Computing (erstwhile ER&DCI), Trivandrum, Govt. of India.	Deputy Director	2003 - 2004
Electronics Research and Development Centre of India, Trivandrum, Govt. of India.	Senior Scientific Officer	1999 – 2003
Electronics Research and Development Centre of India, Trivandrum, Govt. of India.	Scientific Officer	1995 - 1999

8. Patents

- "Speed Sensorless Doubly Fed Slip-Ring Induction Machine Drive based on Direct Torque and Frequency Control for Double Power Output and Stable Zero Speed Operation" - Patent Registered (3.5.2001).

- "A Device For Sensorless Torque Control of Induction Generator in the Wind Turbine, Using Bi-directional IGBT Inverter" - Patent Registered (16.4.99).
- "A Device for the Storage and Retrieval of Electrical Energy" - Idea Patent Registered (19.8.96).

9. Awards and Recognition

- Received INAE Young Engineer Award 2003.
- Received "CITATION" from Electronics Research And Development Centre of India, Thiruvananthapuram, 'in recognition of his ingenious skills, inventive flair and his sincere dedication to the scientific profession' on 11th May 2002.

11. Major projects and consultancy at IIT Kharagpur

- Solar inverter for grid connected and standalone operation with MPPT (10kVA to 100kVA)
  Industry partner: Signotron India pvt. Ltd., Kolkata
  Installation sites: Different regions in India like West Bengal, Mumbai, Himachal Pradesh, North-Eastern states, etc.
- Solar Inverter with 4-arm configuration
  Industry partner: Keltron, Trivandrum, Kerala - 695 564
- High voltage isolated dc power supply (15kV, 30kV, 75kV, etc.)
  Industry partner: Veeral Control Pvt. Ltd., Gandhinagar
  User industry: IPR, Gandhinagar
- STATCOM with neutral compensation (1MVA) for industrial complex
  Industry partner: CDAC, Thiruvananthapuram
  User industry: Techno park, Trivandrum.
- 3-phase Front end converter with isolated dc source
  Industry partner: Signotron India pvt. Ltd., Kolkata
  User industry: Indian Railways
- 1MVA ac generator using cascaded modular inverters
  Industry partner: Keltron, Trivandrum, Kerala - 695 564
- Sensorless high voltage single phase front-end converter and inverters (180kVA, 130kVA)
  Industry partner: Signotron India pvt. Ltd., Kolkata
  User industry: Indian Railways
- Active single phase inverter control with standalone and grid mode operation
  Industry partner: Keltron, Trivandrum, Kerala - 695 564
  User industry: GAIL, India, BARC, India
  Installation sites: Tamil Nadu, Kerala.
- High frequency active compensator for high power applications
  Industry partner: Veeral Control Pvt. Ltd., Gandhinagar
  User industry: ABB, India.
- Sensorless Permanent Magnet Synchronous Motor Controller
  Industry partner: Veeral Control Pvt. Ltd., Gandhinagar
  User industry: BHEL, Hyderabad.
- Design of 4MW converter and development of scaled down unit of 100KW converter
  Industry partner: Electronics Corporation of India Limited (ECIL), Govt. of India.
- Design and Development of 120KW Single Phase Static Bi-directional Converter $(dc \leftrightarrow ac)$
  Industry partner: BHEL, Bangalore-560 026
- Series compensation of six step inverter for high speed reluctance motor drive
  Industry partner: Veeral Control Pvt. Ltd. Gujarat,
  User industry: Bhabha Atomic Research Centre (BARC), India

12. Major projects done at C-DAC, Thiruvananthapuram

- Development of the Controller for Variable Speed Wind Generation of 250KW:
  Customer: Vestas RRB Ltd., Muppandal, Tamil Nadu.
  Back-to-back converter based wind power generator was successfully installed. It was interfaced with the fixed speed wind electric generator system (VESTAS make) at Tamil Nadu.
- Series Hybrid Electric Vehicle:
  Customer: Ashok Leyland, Chennai.
  Battery and IC engine based this vehicle has been successfully demonstrated in Auto Expo at Delhi.
- Custom Power Devices:
  Customer: Hindustan Latex Ltd., Peekay Steel Ltd.
  100kVA, 750kVA STATCOMs using multi-level converters and 240kVA UPQC have been successfully developed and commissioned.