

Rohan Soman

Key Competences

- Recipient of the Ministry Stipend for outstanding young researchers in Poland
- Proven track record of publishing in leading scientific journals
- 10 years of research experience in the field of SHM using a range of techniques
- Proven ability to be mobile researcher and track record of knowledge sharing
- Metrics (SCOPUS)- *H index*: 12 and *Citations*: 389 as of 18/10/2021

Education

- 2013 - 2016 **PhD in Mechanics**, *Institute of Fluid Flow Machinery, Polish Academy of Science (IFFM, PASci), Gdansk, Poland*
Awarded: October 2016
Thesis Title: Kalman Filter based Neutral Axis Tracking for Structural Health Monitoring for Wind Turbine Tower Structures
Supervisor: Prof. Wieslaw Ostachowicz
- 2009 - 2010 **MSc in Mechanical Engineering Design**, *University of Manchester, Manchester, UK*
Grade- First Class with merit
Thesis Title: Model Updation Method for Damage Detection in Structures
Supervisor: Dr. J. Sinha
- 2005 - 2009 **B Tech in Mechanical Engineering**, *College of Engineering Pune, University of Pune, Pune, India*
Grade- 7.66/10
Thesis Title: Improvement of Trigger Mechanism in Existing Under Barrel Grenade Launcher
Supervisor: Prof. Anil Sahasrabudhe

Professional Experience

- May 2016 **Assistant Professor**, *IFFM, PASci, Gdansk, Poland*
- current Perform high level research in the field of Structural Health Monitoring of composite and metallic structures
Assessment of moisture and temperature induced deterioration in composites
- June 2013 **Marie Curie Research Fellow**, *IFFM, PASci, Gdansk, Poland*
- May 2016 Perform high level research in the field of Structural Health Monitoring on Wind Turbine Structures
Vibration based damage assessment of structures
- Nov 2010 **Marie Curie Research Fellow**, *Cyprus University of Technology, Limassol, Cyprus*
- June 2013 Perform high level research in the field of Structural Health Monitoring for Bridge structures
Optimization of sensor placement based on application demands
- Mar 2010 **Design Engineer**, *A&D Sports, Littleborough, UK*
- Sept 2010 Perform Concept and Detail Design of Gym Equipment including drawings
Maintenance of equipment and Training of Personnel
- Dec 2008 **Intern**, *ARDE Ministry of Defense, India*
- May 2009 Perform concept and detail design for new trigger mechanism of new under barrel grenade launcher
Produce drawings for manufacturing

Foreign Fellowships

- March 2020 **Invited Researcher at the Department of Mechanical and Aerospace Engineering, NCSU for 3 months funded by NAWA Bekker Program- not realized due to the pandemic**
North Carolina State University, Raleigh, NC, US
- Oct 2018 **Invited Researcher at the Department of Mechanical and Aerospace Engineering**
North Carolina State University, Raleigh, NC, US

- Sept 2018 **Invited Researcher at the Department of Civil Engineering and Mechanics**
University of Arizona, Tucson, AZ, US
- 15-19 **Technical Workshop on Modal Analysis**
- Feb 2016 Siemens Industry Software (SISW), Leuven, Belgium
- 21-25 **PhD summer school on Offshore wind farms- Planning to Decommission**
- Sept 2015 Danish Technical University (DTU), Riso, Denmark
- 21-25 **Technical Workshop on Computational Fluid Dynamics**
- Mar 2015 University of Liverpool, Liverpool, UK
- 13-15 **Marie Curie Graduate School- Innovative Technologies for Energy Conversion**
- Oct 2014 Katholieke University Leuven (KU Leuven), Leuven, Belgium
- 21-25 **3rd International Summer School on Smart Materials, Structures and Systems**
- July 2014 University of Trento, Trento, Italy
- 3-4 **Reliability Engineering (RAMS) training**
- Mar 2014 Relex, Italia, Rome, Italy
- 17-18 **Marie Curie Workshop on Entrepreneurial skills**
- Oct 2013 Katholieke University Leuven (KU Leuven), Leuven, Belgium
- 23-27 **Technical Workshop on Wind Energy**
- Sept 2013 Centro Nacional De Energias Renovables (CENER), Pamplona, Spain
- 02-06 **Opening Lecture Series on Wind Energy**
- Sept 2013 Norwegian University of Science and Technology (NTNU), Trondheim, Norway
- 10-13 **Intellectual property rights and Entrepreneurship workshop**
- Mar 2013 Federal Institute for Materials Research and Testing (BAM), Berlin, Germany
- 8-10 **Multi-disciplinary workshop on wireless sensor networks in civil engineering applications**
- Oct 2012 Imperial College, London, UK
- 04 May-
03 June 2012 **Invited Researcher at the Department of Electrical and Electronic Engineering**
Imperial College London, UK
- 26-29 **Multi-disciplinary workshop on Smart Management for Sustainable Human Environment**
- Mar 2012 Telecom ParisTech, Paris, France
- 04-16 **Olympia Summer school on Science and ICT**
- July 2011 Athens Information Technology (AIT), Athens, Greece
- 14-15 **FIB course on Durability and Retrofitting of Concrete Structures**
- Apr 2011 International Federation for Structural Concrete, Nicosia, Cyprus
- 29-31 **Research Skills Training Workshop**
- Mar 2011 Cyprus University of Technology, Limassol, Cyprus

Research Projects

- Nov 2021 **Sonata, NCN, Principal investigator**
- Current Title: Guided waves based reference-free structural health monitoring using fiber Bragg grating sensors (REF-FREE)
- Mar 2020 **Opus, NCN, Principal investigator**
- Current Title: SStudy of fibre optic sensor arrays for Structural Health MOnitoring based on GUided WaveS (SUPERLATIVE)
- Oct 2020 **Alphorn, NCN, Co-investigator**
- Current Title: Fusion of Models and Data for Enriched Evaluation of Structural Health
- Mar 2017 **Sonata-Bis, NCN, Co-investigator, Work Package Leader**
- Current Title: Study of piezoelectric sensors placement and their interaction with structural elements

- Sep 2016 **ERA-NET, NCBiR, Team Member**
- Sep 2019 Title: Maritime Technologies II: Reliable and Autonomous Monitoring System for Maritime Structures (RAMMS)
- Jan 2016 **ComBoNDT, EU H2020, Team Member**
- Apr 2018 Title: Quality Assurance Concepts for Adhesive Bonding of Aircraft Composite Structures by Extended NDT
- Mar 2016 **Preludium 9, NCN, Principal Investigator**
- Sept 2018 Title: Analysis of combined effects of moisture and temperature on the mechanical properties of composites
- Dec 2012 **KompNDT, NCBiR, Team Member**
- Nov 2016 Title: Non-invasive methods for assessing a degradation of physical, chemical and mechanical properties of composite structures
- Nov 2012 **Aquillo, NCBiR, Team Member**
- Oct 2015 Title: Development of the selection method of the offshore wind turbine support structure for polish maritime areas
- Oct 2012 **MareWint EU FP7 MSCA ITN, Team Member**
- Sept 2016 Title: New Materials and Reliability in offshore wind turbines technology
- Dec 2009 **SmartEN EU FP7 MSCA ITN, Team Member**
- Nov 2013 Title: Smart Management for Sustainable Human Environment

Journal Publications

1. Balasubramaniam, K., Fiborek, P., Ziaja, D., Jurek, M., Sawczak, M., **Soman, R.**, Malinowski, P., Global and local area inspection methods in damage detection of carbon fiber composite structures, Measurement, (In Press).
2. **Soman, R.**, Balasubramaniam, K., Golestani, A., Karpinski, M., Malinowski, P., Ostachowicz W., Actuator placement optimization for guided waves based structural health monitoring using fibre Bragg grating sensors, Smart Materials and Structures, (In Press).
3. **Soman, R.**, Multi-objective optimization for joint actuator and sensor placement for guided waves based structural health monitoring using fibre Bragg grating sensors, Ultrasonics, 119, (2022).
4. Sha, G., **Soman, R.**, Radzienski, M., Cao, M., Ostachowicz, W., (2021) A two-step method for additional mass identification in beam structures by measurements of natural frequencies and guided waves. Measurement, 186, 110049.
5. Sha, G., Radzienski, M., **Soman, R.**, Cao, M., Ostachowicz, W., Delamination imaging in composite plates using 2D wavelet analysis of guided wavefields. Smart Material And Structures, 30 015001, (2020).
6. **Soman, R.**, Balasubramaniam, K., Golestani, A., Karpinski, M., Malinowski, P., A two-Step Guided Waves Based Damage Localization Technique Using Optical Fiber Sensors, Sensors, 20 (20), 5804, October 2020.
7. **Soman, R.**, Singh, S., Wandowski, T., Malinowski, P., Development of robust statistical metric based on cumulative electrical power for electromechanical impedance based structural health monitoring. Smart Materials and Structures vol. 29, 11, October 2020.
8. Singh, S., **Soman, R.**, Wandowski, T., Malinowski, P., A variable data fusion approach for electromechanical impedance based damage detection and classification. Sensors, 20 (15), 2302, July 2020.
9. Sha, G., Radzienski, M., **Soman R.**, Ostachowicz, W., Cao M., Multiple damage detection in composite laminated beams by data fusion of Teager energy operator-wavelet transform mode shapes. Composite Structures- Volume 235, 1 March 2020, 111798.
10. **Soman R.**, Semi-automated methodology for damage assessment of a scaled wind turbine tripod using enhanced empirical mode decomposition and statistical analysis. International J. of Fatigue- Volume 134, May 2020, 105475.
11. **Soman, R.**, Malinowski, P., A real-valued genetic algorithm for optimization of sensor placement for guided waves based structural health monitoring. Hindawi-Journal of Sensors, Volume 2019 Article ID 9614630.
12. Veic, D., Sulisz, W., **Soman R.**,(2019): Effect of breaking wave shape on impact load on monopile structures. Brodogradnja, Vol. 70 No. 3, 2019, 25-42.
13. **Soman R.**, Kudela, P., Balasubramaniam, K., Singh, S., Malinowski, P., (2019): A Study of Sensor Placement Optimization Problem for Guided Wave-Based Damage Detection. Sensors 19 (8), 1856.

14. Ostachowicz, W., **Soman R.**, Malinowski P., (2019): Optimization of sensor placement for structural health monitoring: A review. *Structural Health Monitoring*, 18 (3), 963-988.
15. **Soman R.**, Ostachowicz, W., (2018): Kalman Filter Based Load Monitoring in Beam-like structures Using Fibre-Optic Strain Sensors. *Sensors*, 19(1), 103, 517-525.
16. **Soman R.**, Ostachowicz, W.(2018): Kalman Filter based Neutral Axis tracking for damage detection in composites structures under changing axial loading conditions. *Composite Structures*, 206, 517-525.
17. **Soman R.**, Mieloszyk, M., Ostachowicz, W., (2018): A two-step damage assessment method based on frequency spectrum change in a scaled wind turbine tripod with strain rosettes. *Marine Structures* 61 (2018), 419-433.
18. **Soman R.**, Malinowski, P., Majewska, K., Mieloszyk, M., Ostachowicz, W., (2018): Kalman Filter based Neutral Axis tracking in composites under changing operating conditions. *Mechanical Systems and Signal Processing*, 110 (2018),485-498.
19. **Soman R.**, Majewska, K., Mieloszyk, M., Ostachowicz, W., (2018): Damage assessment in composite beam using infrared thermography, optical sensors and terahertz technique. *Journal of Nondestructive Evaluation, Diagnostics and Prognostics of Engineering Systems*, 1 (3).
20. **Soman R.**, Kyriakides M, Onoufriou T., Ostachowicz W., (2018): Numerical Evaluation of Multi-Metric Data Fusion based Structural Health Monitoring of Long Span Bridge Structures. *Journal of Structure and Infrastructure Engineering*, 14 (6), 673-684.
21. **Soman R.**, Majewska, K., Mieloszyk, M., Malinowski, P., Ostachowicz, W., (2017): Application of Kalman Filter based Neutral Axis tracking for damage detection in composite structures. *Composite Structures*, 184, 66-77.
22. **Soman R.**, Ostachowicz, W., (2017): Modeling of delamination in composite shells under different temperature conditions. *Computer Assisted Methods in Engineering and Science*, 24 (2), 127-135.
23. Opoka, S., **Soman, R.**, Mieloszyk, M., & Ostachowicz, W., (2016): Damage detection and localization method based on a frequency spectrum change in a scaled tripod model with strain rosettes. *Marine Structures*, 49, 163-179.
24. **Soman R.**, Malinowski P., Ostachowicz W., (2016): Bi-axial neutral axis tracking for damage detection in wind-turbine towers. *Wind Energy*, 19, 639-650.
25. **Soman R.**, Malinowski P., Ostachowicz W., (2016): Neutral axis tracking for crack detection in wind turbine towers. *Task Quarterly Journal* 19 (3), 223-235.
26. **Soman, R.**, P. Malinowski, and W. Ostachowicz.,(2015): Comparative study of performance of neutral axis tracking based damage detection. *Journal of Physics: Conference Series*, 628 (1).
27. **Soman R.**, Onoufriou T., Votsis R., Chrisostomou C, Kyriakides M., (2014): Multi-type, multi-sensor placement optimization for structural health monitoring on a medium span bridge. *Journal of Smart Structures and Systems*, 14 (1), 55-70.
28. Jalsan K-E., **Soman R.**, Flouri K., Kyriakides M., Feltrin G., Onoufriou T., (2014): Wireless sensor network layout optimization for structural health monitoring systems. *Journal of Smart Structures and Systems*, 14 (1), 39-54.
29. Han B., Vassilaras S., Papadias C. B., **Soman R.**, Kyriakides M.A., Onoufriou T., Prasad R., (2013): Harvesting energy from vibrations of the underlying structure. *Journal of Vibration and Control*, 19 (15), 2255-2269.
30. Fiborek, P., **Soman, R.**, Kudela, P., Ostachowicz W., Spectral element modelling of ultrasonic guided wave propagation in optical fibers, *Journal of Sound and Vibration* (under review).
31. **Soman, R.**, Wee, J., Peters, K., Optical fibers for ultrasonic Structural Health Monitoring: A review, *Sensors*, MDPI, (under review).

Selected Conferences

1. **Soman, R.**, Radzienski, M., Kudela, P., Ostachowicz, W., "Guided waves mode filtering using fiber Bragg grating sensors", *Proceedings of 48th Annual Review of Progress in Quantitative Nondestructive Evaluation (QNDE2021)*, 28 July-30 July, ASME 2021.
2. **Soman, R.**, Ostachowicz, W., "Ultrasonic Fiber Bragg Grating Sensor Placement Optimization in Structural Health Monitoring Using Covariance Matrix Adaptation Evolutionary Strategy", *Proceedings of the SPIE. Smart Structures/NDE conference*, US, March 2021.

3. **Soman, R.**, Golestani, A., Balasubramaniam, K., Karpinski, M., Malinowski, P., Ostachowicz, W., "Application of Ellipse and Hyperbola methods for Guided waves based structural health monitoring using fiber Bragg grating sensors ", Proceedings of the SPIE. Smart Structures/NDE conference, US, March 2021.
4. **Soman, R.**, Wee, J., Peters, K., Ostachowicz, W., "Optimization of sensor placement for guided waves based SHM using fiber Bragg grating sensors", Proceedings of the SPIE. Smart Structures/NDE conference, US, March 2020.
5. Sha, G., Radzienski, M., **Soman, R.**, Cao, M., Ostachowicz, W., "Concentrated mass localization in beam-like structures using natural frequencies", Proceedings of the SPIE. Smart Structures/NDE conference, US, March 2020.
6. **Plenary Speaker: Soman, R.**, "Opportunities for funding for young researchers: A national and EU perspective", Young Investigator's Conference, Krakow, Poland, 01-06 September 2019.
7. **Soman, R.**, Kudela, P., Malinowski, P., "A two-step strategy for the optimization of sensor placement for structural health monitoring", Young Investigator's Conference, Krakow, Poland, 01-06 September 2019.
8. Choure, A., **Soman, R.**, Ostachowicz, W., "Assessment of thermal degradation of GFRP composite using optical sensors, electromechanical impedance and guided waves based techniques", Young Investigator's Conference, Krakow, Poland, 01-06 September 2019.
9. Choure, A., **Soman, R.**, Ostachowicz, W., "Comparative evaluation of thermal damage on a GFRP sample using Electromechanical Impedance, Guided Waves and Strain-based measurements", XII International Sopot Youth Conference, Sopot, Poland, 07 June 2019.
10. **Soman, R.**, Schagerl, M., Kralovec, C., Schroder, K., Preisler, A., Ostachowicz, W., "Application of Kalman filter based neutral axis tracking for crack length quantification in beam structures", Proceedings of the SPIE. Smart Structures/NDE conference, Denver, US, 03-07 March 2019.
11. Wandowski, T., **Soman, R.**, Malinowski, P., Ostachowicz, W., Puchowski, B., "Application of electromechanical impedance for damage assessment of composite power boat", Proceedings of the SPIE. Smart Structures/NDE conference, Denver, US, 03-07 March 2019.
12. **Soman, R.**, Kudela, P., Malinowski, P., "Improved damage isolation using guided waves based on optimized sensor placement", Proc. of the SPIE. Smart Structures/NDE conference, Denver, US, 03-07 March 2019.
13. Balasubramaniam, K., Singh, S., **Soman, R.**, Malinowski, P., "A Study of Electromechanical Impedance and Guided Wave Techniques for the Sensitivity of Sensors Network in Damage Detection", Proceedings of the 7th Asia-Pacific Workshop of Structural Health Monitoring, Hong Kong SAR, PR China, 12-15 November 2018.
14. **Soman, R.**, Malinowski, P., Kudela, P., Ostachowicz, W., "Analytical, Numerical and Experimental formulation of the sensor placement optimization problem for guided waves" Proceedings of the 9th European Workshop of Structural Health Monitoring, Manchester, UK, 9-13 July 2018.
15. **Soman, R.**, Malinowski, P., Ostachowicz, W., "Comparative study of deterioration of composite due to ice formation using strain, electromechanical impedance and guided waves" Proceedings of the 5th ICEAF conference, Chios, Greece, 20-22 June 2018.
16. **Soman, R.**, Ostachowicz, W., "Monitoring of Infrastructure in the era of big data", XI International Sopot Youth Conference, Sopot, Poland, 25 May 2018.
17. **Plenary Speaker: Soman, R.**, "Brief introduction to Marie Sklodowska-Curie Actions in HORIZON 2020 & Mobile careers of researchers in Europe ", XI International Sopot Youth Conference, Sopot, Poland, 25 May 2018.
18. Kudela, P., **Soman, R.**, Malinowski, P., Ostachowicz, W., "Numerical simulations of lamb waves for optimization of sensor placement in SHM system." 6th European Conference on Computational Mechanics, Glasgow, UK, 11-15 June 2018.
19. **Soman, R.**, Malinowski, P., Ostachowicz, W., "Comparative study of deterioration of composite due to moisture using strain, electro-mechanical impedance, and guided waves", Proceedings of the SPIE. Smart Structures/NDE conference, Denver, US, 04-08 March 2018.
20. **Soman, R.**, Wandowski, T., Malinowski, P., Ostachowicz, W., "Preliminary studies for the optimization of sensor placement for electro-mechanical impedance based damage detection", Proceedings of the SPIE. Smart Structures/NDE conference, Denver, US, 04-08 March 2018.
21. **Soman, R.**, Malinowski, P., Ostachowicz, W., "The comparative study of deterioration of composite due to temperature using strain, electromechanical impedance and guided waves", Proceedings of the EASN conference 2017, Warsaw, Poland, 25-29 September 2017.

22. **Soman, R.**, Majewska, K., Mieloszyk, M., Malinowski, P., Ostachowicz, W., "Kalman Filter based Neutral Axis tracking for damage detection in composite structures", Proceedings of the IPM conference 2017, Krasieczyn, Poland, 28-31 May 2017.
23. Majewska, K., **Soman, R.**, Mieloszyk, M., Ostachowicz, W. "Assessment of delamination in composite beam using infrared thermography, optical sensors and terahertz technique", Proceedings of the SPIE. Smart Structures/NDE conference, Portland, US, 25-29 March 2017.
24. Mieloszyk, M., **Soman, R.**, Bonilla, V., Ostachowicz, W. "Moisture contamination detection in adhesive layer using embedded Fibre Bragg grating sensors", Proceedings of the SPIE. Smart Structures/NDE conference, Portland, US, 25-29 March 2017.
25. Ostachowicz, W., Malinowski, P., **Soman, R.**, Wandowski, T., "Damage Assessment in Wind Turbine Technology", Proceedings of the Energy and Fuels Conference 2016, Krakow, Poland, 21-23 September 2016.
26. **Soman, R.**, Majewska, K., Mieloszyk, M., Malinowski, P., Ostachowicz, W., "Kalman Filter based Neutral Axis tracking under varying temperature conditions", Proceedings of the 8th European Workshop of Structural Health Monitoring, Bilbao, Spain, 5-8 July 2016.
27. **Soman, R.**, Majewska, K., Razdzienski, M., Ostachowicz, W., "Performing Modal Analysis for Multi-metric measurements: A discussion", SPIE. Smart Structures/NDE, San Diego, US, 20-24 March 2016.
28. **Soman, R.**, Malinowski, P., Ostachowicz, W., Paulsen, U., "Kalman filter based data fusion for Bi-Axial neutral axis tracking in wind turbine towers", IWSHM Conference, Stanford, US, 1-3 September 2015.
29. **Soman, R.**, Malinowski, P., Ostachowicz, W., "Threshold determination for neutral axis tracking based damage detection in wind turbine towers", EWEA Offshore Conference, Copenhagen, Denmark, 10-12 March 2015.
30. **Soman, R.**, Malinowski, P., Ostachowicz, W., Paulsen, U., "Kalman filter based data fusion for neutral axis tracking in wind turbine towers", SPIE Conference on Smart Structures/NDE, San Diego, USA, 8-12 March 2015.
31. Horcas, S. G., di Lorenzo, E., Martinez, J., Mehdi, R., Mehta, D., Pereira, G. F., **Soman, R.**. MARE-WINT: New Materials and Reliability in Offshore Wind Turbines Technology. European Academy of Wind Energy Conference, Orleans, France 28-31 October 2014.
32. **Soman, R.**, Malinowski, P., Ostachowicz, W., "Kalman filter based data fusion for neutral axis tracking for damage detection in wind turbine towers", Proceedings of the 7th European Workshop of Structural Health Monitoring, Nantes, France, 8-11 July 2014.
33. **Soman, R.**, Malinowski, P., Ostachowicz, W., "Neutral axis tracking for damage detection in wind turbine towers", EWEA 2014 Conference, Barcelona, Spain, 10-14 March 2014.
34. **Soman, R.**, Onoufriou, T., Kyriakides, M., Votsis, R., Chrisostomou, C., "Design of a Compound SHM System for Damage Detection of Long Span Bridges using Data Fusion", SmartEN concluding conference, Limassol, Cyprus, 9-10 October 2013.
35. **Soman, R.**, Onoufriou, T., Kyriakides, M., "Damage assessment of bridges using compound SHM-signal processing and communication challenges", 21st European Signal Processing Conference (EUSIPCO), Marrakesh, Morocco, 9-13 September 2013.
36. Han, B., Papadias, C., Kalis, A., **Soman, R.**, Kyriakides, M., Onoufriou, T., "Energy harvesting for sensors in infrastructure monitoring and maintenance", International Association for Bridge and Structural Engineering Conference (IABSE) 2013, Rotterdam, Netherlands, 8-10 May 2013.
37. **Soman, R.**, Onoufriou, T., Votsis, R., Chrisostomou, C., Kyriakides, M., Han, B., "Wireless sensor placement based on SHM requirements and net energy consumption", 2nd International Conference on Civil Engineering and Building Materials (CEBM2012), Hong Kong, 17-18 November 2012.
38. **Soman, R.**, Onoufriou, T., Votsis, R., Chrisostomou, C., Kyriakides, M., "Optimisation of wireless sensor locations for SHM based on application demands and networking limitations", 6th International Conference on Bridge Maintenance, Safety and Management (IABMAS 2012), Lake Como, Italy, 8-12 July 2012.
39. **Soman, R.**, Sinha, J., "Damage detection in plate using gradient search sensitivity method of FE model updating", 3rd International Conference on Computational Methods in Structural Dynamics and Earthquake Engineering (COMPDYN 2011), Corfu, Greece, 26-28 May 2011.

Book Chapter

1. **Soman R.**, Malinowski P., Ostachowicz W.: Detection of damage in metallic structures for offshore applications, MARE-WINT: New Materials and Reliability in Offshore Wind Turbine Technology, Editors: Ostachowicz, W., McGugan, M., Schroder-Hinrichs, J., Luczak, M.

Awards and Distinctions

- Received the grant from the Ministry of higher education for outstanding young researchers.
- Received **MCAA Micro-media Grant** for **open access publishing** in 2019.
- Winner of the **START 2018** grant for most promising researchers in Poland under the age of 30.
- Winner of the **best publication of 2018** by young researcher given by the Gdansk Division of PASci.
- Recognized as the **outstanding reviewer** of the Smart Material and Structures Journal for 2018.
- Received **MCAA Micro-media Grant** for open access publishing in 2018.
- Received **MCAA Micro travel grant** for attending MSCA Conference in Malta.
- Received **travel grant** from University of Trento for attending the Summer School 2014.
- Winner of 3 **National Talent Search** Examinations awarded by the Ministry of Education, Maharashtra, India.
- **Fellow Representative** on the scientific committee of the SmartEN ITN project.

Supervising and Mentoring Experience

- **PhD Co-supervisor** of Mr Jitendra Kumar Sharma (February 2021- ongoing) from IMP PAN in the area of Artificial intelligence for generation of simulated damage signals under the Alphorn project
- **PhD Mentor** of Dr Ganggang Sha (October 2018- October 2020) from Hohai University in the area of Vibration based structural health monitoring.
Research Output: 2 journal papers accepted and 2 under review.
- **Master's Dissertation Supervisor** of Mr Aditya Choure (November 2018- March 2020) from Dresden International University in the area of temperature induced degradation in composites.
Research Output: 2 conference papers.
- **Mentor** to 5 Marie Curie incoming Fellows to Poland in the area of research careers and milestones planning.

Service to the Profession

- Former Chair of the Marie Curie Alumni Association- Polish Chapter (2017-2021).
- Guest editor for 2 special issues in international peer reviewed journals.
- Reviewer for more than 20 journals from the JCR list.
- Participation and organization of science picnics and lectures in schools for the popularization of science.
- Promotion of mobile careers in research and influencing policy for incoming researchers through newspaper articles and interviews.

Miscellaneous

Computer Skills Pro Engineer, SolidWorks, ABAQUS, ANSYS, AutoCAD, LaTeX, Grapher

Programming Skills MathCAD, MATLAB, AutoLISP, Turbo C

Languages English, Hindi, Marathi, Polish (Intermediate), German (Basic), Greek(Basic)