ANIL KUMAR B.C.

Designation: ASSISTANT PROFESSOR **Date of Birth**: 26th September 1982 **Date of joining at LBSCEK:** 16-01-2008

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Educational Qualifications:

- Doing Ph.D. under QIP scheme at National Institute of Technology Karnataka, Surathkal.
- Master of Technology in Mechanical Engineering (Thermal Sciences) from National Institute of Technology Calicut, Kerala in the year 2012.
- Bachelor of Technology in Mechanical Engineering from LBS College of Engineering Kasaragod, Kerala (Kannur University) in the year 2004.

Research Interest:

Renewable Energy; Solar Energy; Solar Cooking: Multi-Criteria Decision Making; Biodiesel; Nanotechnology; Heat Transfer.

Teaching Experience:

- Guest Lecturer at LBS College of Engineering Kasaragod from October 2004 to April 2005.
- Lecturer at Sree Narayana Guru College of Engineering & Technology Payyanur from June 2005 to October 2007.

Assistant Professor at LBS College of Engineering Kasaragod from January 2008 to till date.

Subjects Taught:

- **UG:** Advanced Energy Engineering; Engineering Mechanics; Basic Mechanical Engineering; Engineering Graphics; Mechanics of Solids; Operations Research; Thermodynamics; Metrology and Instrumentation.
- PG: Thermal Environmental Engineering; Design of Heat Transfer Equipment.

Achievements:

- Second Rank in the Kannur University BTech Degree Examinations (Mechanical Engineering) in the year 2004.
- > Qualified GATE in the year 2007 & 2010.
- > Best Teacher Award for the year 2015-16 in LBS College of Engineering Kasaragod.
- Participated and won the second place for the best poster presentation award for the paper titled 'Solar cooker with low cost sensible heat storage medium' in the Mahindra University Research Symposium (MURS 2020).

Membership in Professional bodies:

Life time membership in REST SOCIETY FOR RESEARCH INTERNATIONAL from June 2021. [Membership No: LM: AA0216]

LIST OF JOURNALS:

- B.C. Anilkumar, R. Maniyeri, S. Anish, "Optimum selection of phase change material for solar box cooker integrated with thermal energy storage unit using multi-criteria decision-making", *Journal of Energy Storage*, Vol. 40, No. 102807, https://doi.org/10.1016/j.est.2021. (SCI-Impact factor: 3.762)
- B.C. Anilkumar, R. Maniyeri, S. Anish, "Design, Fabrication and Performance Assessment of a Solar Cooker with Optimum Composition of Heat Storage Materials", *Environmental Science and Pollution Research*, 2020 (Available Online), https://doi.org/10.1007/s11356-020-11024-3. (SCI-Impact factor: 3.1)
- C. Sreerag, P. Sachin, K.C. Shyamraj, P. Aswin, K. Akhil, P.C. Saishyam, B.C. Anil Kumar, An Experimental & Numerical Investigation of Heat Loss from Spherical Cavity Solar Receiver, *International Journal of Advance Research and Innovative Ideas in Education*, Volume 2, Issue 4, 2017.
- V.K. Nideep Nirmal and B.C. Anilkumar, Experimental Investigation into the effects of four-way catalytic converter on four stroke diesel engine emissions, *International Journal of Engineering Research & Technology*, Volume 4, Issue 10, October 2015, PP 402-406.

- K. Vipin and B.C. Anilkumar, Selection and Comparative Studies of working fluids for Organic Rankine Cycle(ORC), *International Journal of Engineering Research & Technology*, Volume 4, Issue 10, October 2015, PP 28-33.
- V.M. Jeevanlal and B.C. Anilkumar, Experimental Investigation of Heat Transfer from a Flat and Surface Indented Plate Impinged with Cold Air Jet Using Circular Nozzle, *International Journal of Emerging Engineering Research & Technology*, Volume 2, Issue 5, August 2014, PP 160-170.
- V.V. Rakesh, B.C. Anilkumar and Robins Aikkara, Investigation of Various Properties of Biodiesel from Waste Cooking Coconut and Palm Oil and Comparison with the Petroleum Diesel, *International Journal of Emerging Engineering Research & Technology*, Volume 2, Issue 7, October 2014, PP 36-42.

LIST OF CONFERENCES:

- B C Anil Kumar, R. Maniyeri, S, Anish, "Development of a Computational Procedure for Designing Thermal Energy Storage Unit for Solar Box Cooker", 3rd International Conference on Advances in Mechanical Engineering and Nanotechnology (ICAMEN-2021), March 18-19, 2021, Manipal University Jaipur and NIT Uttarakhand, India.
- B C Anil Kumar, R. Maniyeri, S, Anish, "Solar Cooker with Low Cost Sensible Heat Storage Medium", *Mahindra University Research Symposium (MURS-2020)*, November 26-27, 2020, Mahindra University, Hyderabad. Telangana, India.
- B C Anil Kumar, R. Maniyeri, S, Anish, "Design, fabrication and performance assessment of a solar cooker with optimum composition of heat storage materials", 5th International National Conference on Recent Advancements in Chemical, Energy and Environmental Engineering, February 13-14, 2020, SSN College of Engineering, Chennai, India.
- B C Anil Kumar, R. Maniyeri, S, Anish, "Numerical Investigation on the Effect of Various Geometries in a Solar Box Type Cooker: A Comparative Study", 46th National Conference on Fluid Mechanics and Fluid Power (FMFP), December 9-11, 2019, PSG College of Technology, Coimbatore, India.
- B C Anil Kumar, R. Maniyeri, S, Anish, "Experimental Investigation on the Effect of Decahedron Frustum Shaped Reflector on the Performance of a Cylindrical Box Type Solar Cooker", *International Conference on Sustainable Energy and Environment Challenges (SEEC-2019)*, November 27-29, 2019, CSIR-NEERI, Nagpur, India.
- B C Anil Kumar and V. Sajith, "Experimental investigation on the effect of catalytic nano particles on fuel properties and wear characteristics", *International Conference AMMMT-*2013, Siddaganga Institute of Technology, Tumkur.
- Presented a paper titled "Experimental investigation On the effect of low cost sensible thermal energy storage medium in a solar box-type cooker", in the *International Conference on Technology Convergence in Engineering, Energy and Sustainability* from 11th -12th July 2019 at Vimal Jyothi Engineering College Kannur, Kerala.
- Participated in the 8th National Conference on Technological Trend held at College of Engineering Trivandrum, Kerala.

- Participated at the "National Conference on Renewable Energy Systems and Engineering" on 7th and 8th November 2014 conducted at Vivekananda College of Engineering & Technology Puttur, Karnataka.
- Presented a paper titled "Design & experimental investigation of four-way catalytic converter", in the 2nd National Conference on Technological Advancements in Engineering from 17th -18th March 2016 at Sree Narayana Guru College of Engineering & Technology Payyanur, Kerala.
- Presented a paper titled "An Experimental& Numerical Investigation Of Heat Loss in a Spherical Cavity Solar Receiver" in the 3rd National conference on Technological Advancements in Engineering held at Sree Narayana Guru College of Engineering Engineer & Technology Payyannur on 25th March 2017.
- Presented a paper titled "An Experimental& Numerical Investigation Of Heat Loss in a Conical Cavity Solar Receiver" in the 3rd National conference on Technological Advancements in Engineering held at Sree Narayana Guru College of Engineering Engineer & Technology Payyannur on 25th March 2017.
- Presented a paper titled "Experimental Analysis on Solar Panel Cooling using Heat Pipe" in the 4th National Conference on Technological Advancements in Engineering held at Sree Narayana Guru College of Engineering & Technology Payyannur on 16th-17th March 2018.
- Presented a paper titled" Design of Electromagnetic Reciprocating Engine" in the National Conference on Recent Trends in Engineering & Technology held at Government Polytechnic College, Kasaragod, Periye from 1-03-2018 to 2-03-2018.

LIST OF FACULTY DEVELOPMENT/SHORT TERM PROGRAM:

- Successfully completed and Topped the Qualified Exam of One Week Workshop on "Multi Criteria Decision making" (online mode) from 19-04-2021 to 23-04-2021 organized by REST Society for Research International (RSRI) Krishnagiri, Tamil Nadu, India.
- Successfully completed and Qualified Exam of One Week "Recent trends in Statistical analysis" (online mode) from 29-03-2021 to 03-04-2021 organized by REST Society for Research International (RSRI), Krishnagiri, Tamil Nadu, India.
- AICTE-Training And Learning (ATAL) Academy online Faculty Development Programme on "CFD" from 4-01-2021 to 8-01-2021 at L B S College of Engineering, Kasaragod, Kerala.
- AICTE-Training And Learning (ATAL) Academy online Faculty Development Program on "Green Technology & Sustainability Engineering" from 8-12-2020 to 12-12-2020 at National Institute of Technology Raipur.
- One Week Faculty Development Program (FDP) on "*Recent advances in solar energy, optimization and its applications*" from 23rd to 27th of November 2020, organized by Department of Mechanical Engineering, Nitte Meenakshi Institute of Technology, Bangalore-64, Karnataka.

- AICTE-Training And Learning (ATAL) Academy online Faculty Development Programme on "*Block Chain*" from 2-11-2020 to 6-11-2020 at LBS College of Engineering Kasaragod, Kerala.
- Webinar on "*Role of glasses in energy and technology*" on 19th September 2020, by the PSG Care, Coimbatore, Tamilnadu.
- Online Faculty Development Program on "*Emerging Fields in Thermal Engineering*" Organized from 13th to 15th August 2020 by the Department of Mechanical Engineering Providence College of Engineering, Chengannur, Kerala.
- Webinar on "Planning and Developing in-class Experiments for Fluid and Thermal Sciences" on 24-June-2020, by the Department of Mechanical Engineering, LBS College of Engineering Kasaragod, Kerala.
- Online Short-Term Training Program on "*Research Methodology*" Organized from 28th to 30th May 2020 by the Department of Mechanical Engineering, Amal Jyothi College of Engineering Kanjirappally, Kottayam, Kerala.
- Online workshop on "Scientific Writing for Journals" organized by Springer Nature on 15th May 2020.
- TEQIP III sponsored Faculty Development Program on "Fiber Reinforced Concrete and its Applications" from 18-11-2019 to 22-11-2019 at National Institute of Technology Karnataka, Surathkal.
- TEQIP III sponsored Short term course on "Modelling and Simulation of Micro and Macro Multiphase system" from 08-01-2019 to 12-01-2019 at National Institute of Technology Karnataka, Surathkal.
- Successfully completed 8 Week (Jan-Mar 2019) Online Certification course in "Matlab programming for numerical computation" conducted by NPTEL 2019.
- DTE sponsored Faculty Development Program on "Research Perspectives in Emerging Areas of Industrial Safety and Environmental Engineering" from 3-12-2018 to 7-12-2018 at Govt. College of Engineering, Thrissur, Kerala.
- DTE sponsored STTP on "Energy Conversion Technologies for Future Research Prospects" from 25-06-2018 to 29-06-2018 at Govt. College of Engineering, Thrissur, Kerala.
- AICTE-Faculty Development Program on "Research Methodology in Engineering & Technology" from 21st October to 3rd November 2013 at College of Engineering Munnar, Kerala.
- Short-Term Training Program on "Modelling & Analysis of Thermal Systems" from 9th to 11th July 2012 at Government College of Engineering, Kannur, Kerala.
- AICTE-Faculty Development Program on "Spotlight on Risk Management of Chemical Plants/Oil Refineries" from 27th April to 9th May 2009 at Amal Jyothi College of Engineering, Kanjirappally, Kerala.
- Three-day workshop on "ANSYS 10.0" by Intercad Institute Pvt.Ltd at LBS College of Engineering Kasaragod on March 2009.
- Staff Development Program on "Simulation Software and Loco Engineering" from 27th to 28th March 2009 at LBS College of Engineering Kasaragod, Kerala.

- Short term course on "*Teaching Excellence and Methodologies*" organized bi ISTE, Kerala section from 27-06-2005 to 02-07-2005 at Vidya Academy of Science & Technology, Thrissur, Kerala.
- Induction Training Program for the Faculty at LBS College of Engineering Kasaragod from 16th to 18th January 2008.
- Two-day Workshop on *Matlab* from 23rd to 24th February 2005 at LBS College of Engineering Kasaragod, Kerala.

LIST OF EXPERT TALK:

Delivered an expert talk on "Fundamentals of Engineering Mechanics" on 8th & 10th February 2017 at College of Engineering Trikaripur, Kerala.

ADMINISTRATIVE WORKS:

- Class Advisor, BTech Mechanical Engineering (2012-2016 Batch), from 2012 to 2016, LBSCE Kasaragod.
- Class Advisor, BTech Mechanical Engineering (2015-2019 Batch), from 2016 to 2019, LBSCE Kasaragod.
- Convenor, orientation program for first year students and parents, 2015-2016 Batch, from 3-07-2015 to 5-07-2015 at LBSCE Kasaragod.
- Secretary, Staff club for the period 2014-2015, LBSCE Kasaragod.
- > Resident Tutor, Men's Hostel III, from 2014-2016, LBSCE Kasaragod.
- > Chief Superintendent of Kerala PSC Examinations, 2017-2018, LBSCE Kasaragod.
- Assistant Chief Superintendent of Examinations, Kannur University, 2014-2019, LBSCE Kasaragod.
- > Deputy Warden, College Hostels, 2016-2019, LBSCE Kasaragod.