LIST OF RECENT PUBLICATIONA

1] **N. S. Pujari,** Mingxing Wang and Kenneth E. Gonsalves, "Co and Terpolymer Reactivity Ratios of Chemically Amplified Resists", Polymer **2017**, *118C*, 201.

2] **N S Pujari,** S. Jayaprakash**,** S. Sarkar and R. Bhatkal, "Dielectric Ink Compositions", International Patent Application, **2018**, PCT/US2018/032503**.**

3] **N S Pujari,** S. Jayaprakash, E. Poh, S. Sarkar, C. Bilgrien and M. Murphy, "Solder Joint Analysis of Tin-Lead and Bismuth based Lead free PV Ribbons in High Throughput Manufacturing", Proceedings 35th European Photovoltaic Solar Energy Conference and Exhibition, **2018**, *1*, 210.

4] **N S Pujari,** S. Telu, S. Jayaprakash. M. Ribas and M. Murphy, "Non-Eutectic Low Melting Temperature Alloys for PV Ribbon Tinning", 7th Workshop on Metallization and Interconnection for Crystalline Silicon Solar Cells, **2018**. Available at SSRN: https://ssrn.com/abstract=3152431 or http://dx.doi.org/10.2139/ssrn.3152431.

5] **N S Pujari,** E. Poh, S. Sarkar, M. Murphy, and C. Bilgrien, "New Challenges for Tabbing and Stringing Liquid Fluxes", Energy Procedia **2018**, *150*, 28**.**

6] **N S Pujari,** S. Sarkar and C. Bilgrien, "Solder Paste for Module Fabrication of Solar Cells", International Patent Application, **2019**, *Filed***.**

7] **N. S. Pujari,** "Factors Affecting Quality of Solder Joints in MultiBusbar Interconnection Assembly", Microelectronics Reliability, **2020**, *communicated.*

8] **N S Pujari,** Krithika PM, Pavan V, S. Sarkar and C. Bilgrien, "Lead Free Low Temperature Solder Paste for Shingling Interconnection", Proceedings 37th European Photovoltaic Solar Energy Conference and Exhibition, **2020**, *29*.

9] **N S Pujari,** Krithika S. Sarkar and C. Bilgrien, "Solder Paste for Interconnecting Structured Ribbons", Proceedings 38th European Photovoltaic Solar Energy Conference and Exhibition, *Proceedings 38th European Photovoltaic Solar Energy Conference and Exhibition, 2021, 29.*

10] **N S Pujari,** "Factors Affecting Quality of Solder Joints in Multi Busbar Interconnection", *SMT007 magazine, 2021, Aug issue 68.*

11] **N S Pujari,** P. Krithika, S. Sarkar and C. Bilgrien, "Fabrication of Solar Modules", International Patent Application, **2021**, *Filed***.**

NARAHARI S. PUJARI

B410 Century Marvel
Kempapura Hebbal
Bangalore-560024 (KA) India

Ph. No: (m): +91-9980890403
Fax. No.: +91-80-42440300
E-mail: nspujari@gmail.com
Homepage: http://nspujari.googlepages.com/

Objective

Hard working detail oriented person seeks a challenging, long-term career in interdisciplinary areas encompassing R&D and management. Aspires to work in a professional environment and further develop technical as well as managerial skills.

Work Summary

- Ph D in chemistry with 15+ years of experience in renewable energy (photovoltaics (PV)), polymers, ink and paste formulation. Specialized in synthesis, formulation, application, coating and interconnection technologies. Experience in running and managing business unit.
- Professional creative, flexible with proven track analytical skills.
- Currently Senior Global Technology Manager and handle research and development, PV and allied business and technologies, and project management. Adept at researching and managing a team of people and taking technology from laboratory scale to the production.
- Expertise in working and leading multidisciplinary teams, sourcing material/equipment, building facility, developing strategy, product positioning and roadmap, and technical support to scale-up/production and customers.
- Have commercialized several products in semiconductor, electronics, preform and PV technologies in past few years.
- Several patents, talks and publications in peer reviewed journals and consortia.
- Holder of six sigma green belt and certified internal auditor ISO17025:2005 and ISO 9001:2008. Trained on project management and 8D Tops problem solving methodology.

Education Summary

- **Ph. D. (Chemistry, Polymer Sc.) 2007**
  National Chemical Laboratory Pune University Pune India
  Topic: “Frontal Polymerization: Synthesis of homo and copolymers”
- **M. S. (Polymer Science) 2001**
  Nowrosjee Wadia college, Pune University, India
- **B. S. (Chemistry) 1999**
  Nowrosjee Wadia College, Pune University, India

Membership and Awards

- International Technology Roadmap for Photovoltaics (ITRPV)- Working member and contributor
- Solar Energy Society of India- Life member
- Society of Polymer Science-Pune Chapter- Life member

Awards

- Macdermid Winner Circle Award for the Innovation 2019 and 2020

- Level-3 award for Innovation and Excellence, Cookson Global Award 2013
- Keerti Sangoram Memorial Endowment Award for the Best Research Scholar in Engineering Sciences, 2007.
- Best poster award for the poster "Instabilities in Frontal Polymerization" on the occasion of National Science Day, National Chemical Laboratory, February 2005.
- Senior Research Fellowship award from Council of Science and Industrial Research, New Delhi, 2005.
- Ranked second in Pune University in M. Sc. (Polymer Sc.) 2001

Job Summary

1] Senior Global Technology Manager- Macdermid Alpha Electronics Solutions Sept2019-Till date
2] Manager-R&D- Macdermid Alpha Electronics Solutions., Yeshvanthpur, Bangalore, from Oct08-Sept2019.

Key Responsibilities

- Report directly to the Director of the company and Vice President with dotted line.
- Support projects through original research and mentoring/managing group members.
- Confer with marketing team, production, sales and customers on needs and build research direction and strategy with a considerable amount of independent judgment and original thinking in planning and executing research and development activities. These activities aim towards enhancing knowledge, advancement in technologies and generating business for Macdermid Alpha.
- Develop prototypes and subsequent commercialization of new materials and test methods for PV (photovoltaic) and semiconductor/electronic industries. We also work on developing interconnect technology for advanced photovoltaic architectures, automotive and flexible and in-mould electronics. Work includes ink and paste development as well as flux for advanced PV and semiconductor applications.
- Develop product line and applications in PV and allied technologies such as energy storage and solder paste for semiconductor and advanced assemblies.
- Supervising, guiding, directing and managing the fellow colleagues in PV and New Business Development Group.
- Responsibilities also include writing SOPs, technical reports/patents etc. and making the presentations and branding.
- Accountable for authorizing reports, optimizing synthesis/formulation making processes, evaluating and testing new methods and raw materials. I also act as a project manager from India on global projects.
- Responsible for technology roadmap and build pipeline of programs for R&D, application teams and product guides for customers
- Responsible for giving training to sales and CTS (customer technology service) people within the company and customers. Represent Alpha at various conferences and consortia.
- Work with senior management to provide deep technical leadership to meet deliverables and milestones.

Key Achievements

- *Nano/micron material (2008-till date)*
  - Commercialized polymer coated, functionalized nano/micron sized silver/copper ink and paste for power modules, die attach and printed electronics (2010-2012).

  - Developed of cost and time effective process.
  - Product positioning and strategic planning in flexible electronics.
  - Strong IP (intellectual property) achieved in conductive adhesives and dielectric inks landscape. Because of this, Alpha has 'freedom-to-practice" in this market segment.
  - Commercialization of novel conductive paste and inks for flexible and stretchable electronic surfaces (2014-2022). This has direct impact on share gain in flexible and formable electronics market for Alpha.
- *Solder flux/preform (2010-2021)*
  - Roadmap and product positioning in preform and low temperature melting solder paste/flux
  - Developed noel coating chemistries for interconnections
  - Various flux coated perform products commercialized for Tyco, Samsung, Nokia etc. Achieved significant revenue and market share for the company.
- *PV Technology (2011-till date)*
  - Strategy, Roadmap and product positioning in Photovoltaics
  - Developed novel impact resistant and pollution free coated interconnects (2014-2016)
  - Commercialization of various products (flux, colored interconnects, back contact technology, shingling interconnects and ready ribbon) in 2013-till date
  - Developed novel silver paste for back contact and thin film PV (2017)
  - Strong IP (intellectual property) created in photovoltaic interconnection technology. Inventor of four crucial disclosures. Because of this, Alpha has gained significant market share. Couple of products which came out of my invention earn huge royalty every year.
  - Successfully running global PV group (R&D, marketing, sales and CTS). Achieved over 15M USD product sales/p.a. with 12% CAGR.
- *Reclaim Technology (2012-2019)*
  - Developed unique process for reclaiming copper and solder from PV and related waste
  - Process successfully commercialized in 2012 (Output 500 Kg /day).
  - Work ongoing on E-waste technology.

2. Research Scholar at University of North Carolina, Charlotte, NC, USA. From May 2007-Oct-2008
   - I worked on an Industrial project sponsored by Rohm & Haas Electronics (Now Dow Chemical Company). The project was on developing new generation photoresists (EUV and 193 nm immersion) for next generation lithography.
   - Work involved new monomer and polymer synthesis, formulations and extensive characterization using conventional polymer characterization techniques as well as advanced lithographic instruments such as e-beam lithography.

Skills and Training

- Fifteen plus years of experience in material science/nanotechnology/polymer R & D. Highly expert in running business unit, resource management and people management. Developing growth strategy and portfolio for the product line.
- Highly expert in suspension, high internal phase emulsion and frontal polymerization technique. Expertise in acrylate/epoxy chemistries and material chemistry for automotive, LEDs and electronic industry.
- Expertise in coating and interconnection technologies specially for PV and in-mould electronics.

- Expertise in building new product line set-up and laboratory, complete characterization and developing new test and application methods. Have extensively work with global teams and across the geographies and departments.
- Excellent creativity, concentration and self motivation.
- Expertise in formulating and application development in PV and inks/paste for printed electronics and in mould electronics.
- Expertise in project management and taking project from inception to production.
- Expertise in business analysis and forecasting of photovoltaics, renewable energies, LEDs and printed electronics.
- Expertise in FAB lab operations including e-beam lithography, EUV photoresist etc.
- Expertise in sourcing material/equipment and building facilities. Budget and resource allocation.
- Excellent verbal and written communication skills. Expertise in scientific and technical writing and making presentations.
- **Six sigma green belt, 8D Tops and certified internal auditor for ISO17025 system.**
- Very good project management skills. Ability to work and contribute effectively in a collaborative team environment and handle multiple projects.
- **Expertise in driving projects from inception to the completion.**
- Unquestionable integrity, ethical and moral character. Treat others with trust, dignity and respect
- Trained on people management skills.

Training

- Successfully completed project management training and certification 2021-22
- Successfully completed 8D Tops training and certification 2020
- Cookson Leadership program 2015
- Successfully completed six sigma green belt training, 2009.
- Certified Internal Auditor ISO17025:2005 and ISO 9001:2008.
- Training on GLP practice.
- Cookson’s internal project management training 2014, 2021.
- Participated in one month training on technology led Entrepreneurship program organized by HRDG, CSIR and IIM-Bangalore, 2005.
- Participated in several one/two days workshops on various instrument training and ISO systems

Appendix I: Research Areas and Publications

Solar Technology: Development of interconnect technology for crystalline PV solar cells. Novel ECA (electrically conductive adhesives) and solder paste application development for advanced c-Si, shingling and back contact PV technology. Development of business strategies, IP landscape, product positioning and forecasting in PV (photovoltaic) area. Adept in setting up application laboratory and developing new test methods for PV.

*Nanotechnology***:** Development of new nanomaterials for advanced applications in semiconductors. Functionalization of nanoparticles and thorough characterization using advanced techniques. Design of nanocomposites for high refractive index polymers using inorganic modified metal oxides/sulfides. Expert in making conductive ink and paste formulations using nano and micron size powders.

*Formulations/coatings***:** Formulating inks and pastes for soldering technology, LEDs and flexible electronics. Development of coating chemistries for metal sheets and solder powder. Work involved synthesis, formulations and characterization of formulations targeting the end application. Highly expert in UV/thermal curable systems using multivinyl acrylate/epoxy/urethane formulations. Have experience in developing conductive adhesives and polymeric metallic and nonometallic pastes/inks**. Experience in developing all kinds of inks and adhesives including, conductive, dielectric, resistor ink etc.**

*Smart electronics***:** Synthesis and optimization of conductive/nonconductive formulations for next generation electronics (specially flexible and in-mould electronics, automotive and LEDs). Developed new applications and test protocols for new materials. Achieved strong IP portfolio, roadmap, market strategy and complete market analysis of the next generation and printed and in-mould electronics.

Photoresist: Synthesis, characterization of chemical components; formulation and optimization of components as 193 nm and EUV next generation photoresists. Lithographic evaluation and fabrication of integrated chips.

*Other***: Have contributed to developing project management tools for Alpha.**

Publications

Book

1. **N. S. Pujari,** "Frontal Polymerization: Theory, Synthesis and Nonlinear Dynamics", 2010, LAP Lambert Publishing, Germany.
2. **N. S. Pujari, "** LED Phosphor Market", NanoMarkets US 2014.

Publications/patents

1] **N. S. Pujari**, A. R. Vishwakarma, C. R. Rajan and S. Ponrathnam, "An improved process for the preparation of the functionalized acrylamide copolymers", Indian Patent No. 1097/DEL/2004, **2004**.
2] M. C. J. Large, S. Ponrathnam, A. Argyros, **N. S. Pujari**, and F. Cox, "Solution doping of microstructured polymer optical fibres", Optics Exp. **2004**, *12*, 1966.
3] **N. S. Pujari**, A. R. Vishwakarma, M. R. Kelkar and S. Ponrathnam, "Gel formation in frontal polymerization of 2-hydroxyethyl methacrylate", e-Polymers **2004**, *49*, 1.

4] **N. S. Pujari**, A. R. Vishwakarma, T. S. Pathak, S. Mule and S. Ponrathnam, "Frontal copolymerization of 2-hydroxy ethyl methacrylate and ethylene glycol dimethacrylate without porogen: Comparison with suspension polymerization", Polym. Int. **2004**, *53*, 2045.
5] **N. S. Pujari**, A. R. Vishwakarma, T. S. Pathak, A. M. Kotha and S. Ponrathnam, "Functionalized Polymer Networks: Synthesis of microporous polymers by frontal polymerization", Bull Mat. Sci. **2004**, *27*, 529.
6] **N. S. Pujari,** M. R. Kulkarni, M. C. J. Large, I. M. Bassett and S. Ponrathnam, "Transparent chiral polymers for optical applications", J. Appl. Polym. Sci. **2005**, *98(1)*, 58.
7] M. C. J. Large, A. Argyros and **N. S. Pujari** "Solution Doping of Polymer Optical Fibres", PCT. Int. Patent No. WO 2005/090450 A1, **2005**.
8] M C J large, S Ponrathnam, A Argyros, I Bassett, **N S Pujari**, F Cox, G W Barton and M A van Eijkelenborg, "Microstructured polymer optical fibres: New Opportunities and Challenges", Mol. Cryst. Liq. Cryst. **2006,** *446*, 219.
9] **N. S. Pujari**, J. Trivedi, G. C. Ingavle and S. Ponrathnam, "Novel beaded polymers from telechilic methacrylic ether esters", React. Funct. Polymers **2006,** *66(10)*, 1087.
10] **N. S. Pujar**i, B. K. Vaidya, S. Bagalkote, S. Ponrathnam and S. N. Nene, "Poly(urethane methacrylate-*co*-glycidyl methacrylate)-*supported*-polypropylene biphasic membrane for lipase immobilization", J. Membr. Sci. **2006**, *285*, 395.
11] **N. S. Pujari**, S. R. Inamdar, B. D. Kulkarni and S. Ponrathnam, "Water Triggered Frontal Polymerization", Macromol. Rapid Commun. **2007,** *28*, 109.
12] S. R. Inamdar, **N. S. Pujari**, I. A. Karimi, B. D. Kulkarni, S. Ponrathnam and R. K. Tayal, "Spinning Wave Motion in Frontal Polymerization", Chem. Eng. Sci. **2007,** *62(5)*, 1448.
13] **N. S. Pujar**i, S. R. Inamdar, J. A. Ambekar, B. D. Kulkarni and S. Ponrathnam, "An Exhaustive analysis of frontal copolymerization of mono and divinyl monomers", Chem. Eur. J. **2007**, *13*, 5862.
14] K. E. Gonsalves, M. Wang and N. S. Pujari, "High Refractive Index Resist Composed of Anionic Photoacid Generator (PAG) Bound Polymers for 193 nm Immersion Lithography", Proc. SPIE 6923, Advances in Resist Materials and Processing Technology XXV, **2008**, 69231P.
15] K. Kumarbabu, **N. S. Pujari**, S. Ponrathnam and S. N. Nene, "N-vinyl derivative guar gum for aqueous two phase extraction", Sep. Pur. Technol. **2009**, *65*, 9.
16] **N. S. Pujari**, "Frontal Polymerization: Theory, Synthesis and Nonlinear Dynamics, Book published by Lamber Academic Publishing Germany **2010**.
17] **N S Pujari**, S. Arora, S Sarkar, Rahul Raut, Anna Lifton and B. Singh, "Flux Formulation", US 9566668 B2 **2013 (granted)**.
18] **N S Pujari,** S Sarkar, B. Goswami and B. Singh, "Metal Recovery", WO 2015004427 A1 **2014 (granted)**.
19].**N S Pujari,** R. Bhatkal, S Sarkar and B. Singh, "Stretchable Interconnects for Flexible Electronic Surfaces", International Patent, WO/2016/012753 **2014**.
20] **N. S. Pujari,** Mingxing Wang and Kenneth E. Gonsalves, "Co and Terpolymer Reactivity Ratios of Chemically Amplified Resists", Polymer **2017**, *118C*, 201.
21] **N S Pujari,** S. Jayaprakash**,** S. Sarkar and R. Bhatkal, "Dielectric Ink Compositions", International Patent Application, **2018**, PCT/US2018/032503**.**
22] **N S Pujari,** S. Jayaprakash, E. Poh, S. Sarkar, C. Bilgrien and M. Murphy, "Solder Joint Analysis of Tin-Lead and Bismuth based Lead free PV Ribbons in High Throughput Manufacturing", Proceedings 35th European Photovoltaic Solar Energy Conference and Exhibition, **2018**, *1*, 210.
23] **N S Pujari,** S. Telu, S. Jayaprakash. M. Ribas and M. Murphy, "Non-Eutectic Low Melting Temperature Alloys for PV Ribbon Tinning", 7th Workshop on Metallization and Interconnection for

Crystalline Silicon Solar Cells, **2018**. Available at SSRN: https://ssrn.com/abstract=3152431 or http://dx.doi.org/10.2139/ssrn.3152431.
24] **N S Pujari,** E. Poh, S. Sarkar, M. Murphy, and C. Bilgrien, "New Challenges for Tabbing and Stringing Liquid Fluxes", Energy Procedia **2018**, *150,* 28**.**
25] S. R. Inamdar, **N. S. Pujari**, I. A. Karimi, S. Parulekar, S. Ponrathnam and B. D. Kulkarni, "Simulation of Helical Patterns in Free Boundary Dynamics of Polymerization, Appl. Phys. A. **2020**, *communicated.*
26] **N S Pujari,** S. Sarkar and C. Bilgrien, "Solder Paste for Module Fabrication of Solar Cells", International Patent Application, **2019**, *Filed***.**
27] **N. S. Pujari,** "Factors Affecting Quality of Solder Joints in MultiBusbar Interconnection Assembly", Microelectronics Reliability, **2020**, *communicated.*
28] **N S Pujari,** Krithika PM, Pavan V, S. Sarkar and C. Bilgrien, "Lead Free Low Temperature Solder Paste for Shingling Interconnection", Proceedings 37th European Photovoltaic Solar Energy Conference and Exhibition, **2020**, *29.*
29] **N S Pujari,** Krithika S. Sarkar and C. Bilgrien, "Solder Paste for Interconnecting Structured Ribbons", Proceedings 38th European Photovoltaic Solar Energy Conference and Exhibition, *Proceedings 38th European Photovoltaic Solar Energy Conference and Exhibition, 2021, 29.*
30] **N S Pujari,** "Factors Affecting Quality of Solder Joints in Multi Busbar Interconnection", *SMT007 magazine, 2021, Aug issue 68.*
32] **N S Pujari,** P. Krithika, S. Sarkar and C. Bilgrien, "Fabrication of Solar Modules", International Patent Application, **2021**, *Filed***.**

Conference papers
1] A. Argyros, M.C.J. Large, F. Cox, **N. S. Pujari**, S. Ponrathnam, M.A. van Eijkelenborg, S.D. Jackson, R.P. Mildren, "Solution-doped microstructured polymer optical fibre amplifiers and fibre lasers" Australian Conference on Optical Fibre Technology, Australian National University, 5-8 July, 2004, Canberra, Australia.
2] M.C.J. Large, S. Ponrathnam, A. Argyros, **N. S. Pujari**, and F. Cox, "Doped Microstructured Polymer Optical Fibres" Program number Mo33.6, 30th European Conference on Optical Communication, September 5-9, 2004 - Stockholm, Sweden.
3] M.C.J. Large, A. Argyros, F. Cox, **N. S. Pujari,** S. Ponrathnam, M.A. van Eijkelenborg, S.D. Jackson, R.P. Mildren, "Demonstration of microstructured polymer fibre amplifiers and lasers using solution doping" 13th International Plastic Optical Fibres Conference 2004, 27-30 September, Nurnberg, Germany.
4] **N. S. Pujari**, A. R. Vishwakarma, S. Ponrathnam, "Frontal copolymerization of 2-hydroxyethyl methacrylate and ethyleneglycol dimethacrylate", International Conference on polymers (Macro2004), 2004, 14-17 December, Thiruvananthpuram, India.
5] M. C. J. Large, S. Ponrathnam, A. Argyros, I. M. Bassett, **N. S. Pujari**, F. Cox, R. Lwin, G. Barton and M. A van Eijkelenborg, "Microstructured Polymer Optical Fibres: Opportunities and Challenges", 8th International Conference on Frontiers of Polymers and Advanced Materials (ICFPAM), 22–28 April, 2005, Cancun, Quintana Roo, Mexico.
6] **N. S. Pujari**, S. R. Inamdar, R. K. Tayal and S. Ponrathnam, "Frontal Polymerization: Opportunities and Challenges", National Conference on Frontiers in Polymer Science & Technology (Polymer 2006), *Invited,* 2006, 10-12 February, Kolkata, India.
7] **N. S. Pujari**, "Opportunities and Challenges for Products in Crystalline and Thin Film Photovoltaics", Sales Leadership Conference *Invited*, 2013, 18-22 May, Arizona USA.

8] **N. S. Pujari,** Novel Interconnects for Stretchable Electronic Surfaces", Sales Leadership Conference *Invited,* 2015, 14-18 April, Bangalore India.
9] R. Bhatkal **N. S. Pujari** and R. Pandher, "Flexible, Formable Interconnects for 3D Circuits," Flexible and Printable Electronics Conference (Flex2016), *Invited,* 2016, 29Feb-03 March California USA.
10] **N. S. Pujari**, Anna Lifton and Mike Murphy, "Compatibility of PV Ribbons and Fluxes with EVA Encapsulating Films, 32nd European PV Solar Energy Conference and Exhibition, 2016, 20-24 June, Munich Germany.
11] D. Kosuri, M. Ribas, **N.S. Pujari** and S. Sarkar, "Soldering Intermetallics formation in photovoltaic modules, EMSI International Conference, 2017, 17-19 July, Chennai India.
12] **N S Pujari**, S. Telu, S. Jayaprakash. M. Ribas and M. Murphy, "Non-Eutectic Low Melting Temperature Alloys for c-Si Interconnection," 7th Workshop on Metallization & Interconnection for Crystalline Silicon Solar Cells, 2017, 23-24 Oct 2017, Konstanz Germany.
13] **N S Pujari**, Jayaprakash S and M. Murphy, "Liquid Fluxes in PV Technologies", 6th International Conference on Advances in Energy Research 2017, 2017, 12–14 Dec, Mumbai India..
14] **N. S. Pujari,** "Lead Free Soldering to the Tabbing and Stringing Processes", Intersoar India 2017, 5-7 Dec Mumbai India.
15] **N. S. Pujari,** "New Challenges for Tabbing and Stringing Liquid Fluxes", SNEC 12th (2018) International Photovoltaic Power Generation and Smart Energy Exhibition & Conference, **2018,** 27-30 May, Shanghai, China.
16] **N.S. Pujari,** "Solder Joint Analysis of Tin-Lead and Bismuth Based Lead Free PV Ribbons in High Throughput Manufacturing", 35th European PV Solar Energy Conference and Exhibition, 2018, 24-28 September, Brussels, Belgium.
17] **N. S. Pujari,** "A review of Interconnection Technology for Floating PV Applications", Intersolar India 2018, 11-13 December, Bangalore, India.
18] **N. S. Pujari,** "Prevention of Weak Joint Formation in Multi Busbar Interconnection", SNEC 13th International Photovoltaic Power Generation and Smart Energy Exhibition & Conference, 2019**,** 3-5 June, Shanghai, China.
19] **N. S. Pujari,** "Soldering Challenges in MultiBusbar Interconnection Assembly", 36th European PV Solar Energy Conference and Exhibition, 2019, 9-13 September, Marseille France.
20] **N. S. Pujari, "**Advantages of Solder Paste in Shingling Interconnection," SNEC 14th International Photovoltaic Power Generation and Smart Energy Exhibition & Conference, 2020**,** 05-08 August, Shanghai, China.
21] **N. S. Pujari,** "Lead Free Low Temperature Solder Paste for Shingling Interconnection", 37th European PV Solar Energy Conference and Exhibition, 2020, 7-11 September, Lisbon Portugal.
22] **N. S. Pujari, "**Advantages of Prefluxed Ribbon-Wire for Multi Busbar Interconnection," SNEC 15th International Photovoltaic Power Generation and Smart Energy Exhibition & Conference, 2021**,** 02-05 June, Shanghai, China.
23] **N S Pujari,** P. Krithika, S. Sarkar and C. Bilgrien, "Solder Paste for Interconnecting Structured Ribbons", 38th European PV Solar Energy Conference and Exhibition, 2021, 7-11 September, Lisbon Portugal.
24] **N. S. Pujari, "**Printing Parameter Optimization in IBC Interconnection," SNEC 16th International Photovoltaic Power Generation and Smart Energy Exhibition & Conference, 2022**,** 22-25 May, Shanghai, China.
25] **N S Pujari,** P. Krithika, S. Sarkar and C. Bilgrien, "Solder Paste for Interconnecting Interdigitated Back Contact Cells", WCPET-8, 2022, 26-30 September, Milano Italy. *Communicated.*

Other

a] Presented posters at various national/international conferences
b] Have contributed a number of popular science articles in Marathi newspapers like Daily Sakal and Daily Kesari and magazine Satellite.
c] Cover Page photo of a research article in Bulletin of Material Science, December 2004 issue.

Appendix II Personal

Personal

Date of Birth: 28th February 1979
Marital status: married
Nationality: Indian
Language known: English, Marathi, Hindi

Other Interest

Indian classical music, writing fictions and poems, Chess, watching world cinema

---