Dr. Kunjal Sureshchandra Patel
Ph.D. (Physics)
Assistant Professor (Gujarat Education Services Class 2),
Government Science College, Vankal,
Ta: Mangrol, Dist.: Surat- 394430, Gujarat.
Website: (1) https://sites.google.com/msubaroda.ac.in/kunjalpatel/
(2) https://www.msubaroda.ac.in/academics/FOS/Details/4578

Permanent Address: Valsad
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(3) KUNJAL.SURESHCHANDRA@gujgov.edu.in

ACADEMIC DETAILS:

Course	Board/University	School/College	Year of passing	Percentage/CGPA
Ph.D. (Physics)	SARDAR PATEL UNIVERSITY	Department of Physics, SPU, Vallabh Vidyanagar.	March - 2021	**Completed**
M.Phil. (Physics)	SARDAR PATEL UNIVERSITY	Department of Physics, SPU, Vallabh Vidyanagar.	April – 2017	**68.40 % (University 2nd rank)**
M.Sc. (Physics)	SARDAR PATEL UNIVERSITY	Department of Physics, SPU, Vallabh Vidyanagar.	April – 2016	**7.83 CGPA (University 4th rank)**
B.Sc. (Physics)	SARDAR PATEL UNIVERSITY	V.P. & R.P.T.P. Science College, Vallabh Vidyanagar.	April – 2014	**9.10 CGPA (University 3rd rank)**
H.S.C	GSHSEB	R.M. & V.M. Desai Sarvajanik Vidhyadham, Valsad.	March – 2011	**87.18 Percentile Rank / 80 %**
S.S.C	GSHSEB	R.M. & V.M. Desai Sarvajanik Vidhyadham, Valsad.	March – 2009	**84.62 %**

EXPERIENCE DETAILS:

Sr. No.	Employer Name	Designation	Start Date	End Date	Currently Working	Duration
1	**The Maharaja Sayajirao University of Baroda**	Temporary Assistant Professor	09-08-2021	21-12-2022	---	1 year 4 months
	Institute Name	**Department of Physics, Faculty of Science, The Maharaja Sayajirao University of Baroda.**				
2	**Commissionerate of Higher Education**	Assistant Professor **(Gujarat**	22-12-2022	---	√	3 months*

		Education Services Class 2)				
	Institute Name	**Government Science College, Vankal, Ta: Mangrol, Dist.: Surat- 394430, Gujarat.**				

OTHER EXAMS AND COURSES:

Course	Board/University	Subject	Tutor	Year of passing
Gujarat Public Service Comission (GPSC)	**Commissionerate of Higher Education**	Physics	---	September - 2022
Gujarat State Eligibility Test for Assistant Professor (GSET)	The Maharaj Saiyajirao University of Baroda (MSU Baroda)	Physics	---	March - 2022
Gujarat State Eligibility Test for Assistant Professor (GSET)	The Maharaj Saiyajirao University of Baroda (MSU Baroda)	Physics	---	March - 2020
Gujarat State Eligibility Test for Assistant Professor (GSET)	The Maharaj Saiyajirao University of Baroda (MSU Baroda)	Physics	---	December - 2018
Course on Computer Concepts (CCC)	National Institute of Electronics & Information Technology (NIELIT), Ministry of Electronics & Information Technology, Government of India	Certificate in Computer Concepts	---	November - 2019
Certificate in Computer Concepts (CCC)	Dr. Babasaheb Ambedkar Open University (BAOU)	Certificate in Computer Concepts	---	December - 2019
SCOPE	University of Cambridge	Gujarat English Language Test	---	July - 2011
હિન્દી ભાષા ઉચ્ચ શ્રેણી પરીક્ષા	ભાષા નિયામકની કચેરી, ગાંધીનગર (Directorate of Languages, Sports, Youth and Culture Activities Department,	Hindi	---	March - 2023

	Government of Gujarat)			
CCC+	Sardar Patel Institute of Public Administration (SPIPA)	Course on Computer Concepts Plus (CCC PLUS)	---	June - 2023
H. C. Verma Online Certification Course	Indian Institute of Technology Kanpur (IIT Kanpur)	National Anveshika Experimental Skill Test	Prof. H. C. Verma	October - 2021
H. C. Verma Online Certification Course	Indian Institute of Technology Kanpur (IIT Kanpur)	Classical Mechanics - 1	Prof. H. C. Verma	April - 2021
H. C. Verma Online Certification Course	Indian Institute of Technology Kanpur (IIT Kanpur)	Classical Electromagnetism - 1 (Electrostatics)	Prof. H. C. Verma	December - 2020
H. C. Verma Online Certification Course	Indian Institute of Technology Kanpur (IIT Kanpur)	National Anveshika Experimental Skill Test	Prof. H. C. Verma	August - 2020
H. C. Verma Online Certification Course	Indian Institute of Technology Kanpur (IIT Kanpur)	Learning Physics Through Simple Experiments	Prof. H. C. Verma	June - 2020
H. C. Verma Online Certification Course	Indian Institute of Technology Kanpur (IIT Kanpur)	Advanced Course on Special theory of Relativity	Prof. H. C. Verma	May - 2020
H. C. Verma Online Certification Course	Indian Institute of Technology Kanpur (IIT Kanpur)	Basics of Quantum Mechanics	Prof. H. C. Verma	November - 2019
H. C. Verma Online Certification Course	Indian Institute of Technology, Kanpur (IIT Kanpur)	Basics of Special Theory of Relativity	Prof. H. C. Verma	March - 2019
H. C. Verma Online Certification Course	Indian Institute of Technology Kanpur (IIT Kanpur)	Physics of Semiconductors	Prof. H. C. Verma	November - 2017
NPTEL Online Certification Course	Indian Institute of Technology Kanpur (IIT Kanpur)	Introduction to Electromagnetic Theory	Prof. Satyaki Roy	September - 2018
NPTEL Online Certification Course	Indian Institute of Science Bangalore (IISc Bangalore)	Semiconductor Devices and Circuits	Prof. L. Umanand	October - 2018

NPTEL Online Certification Course	Indian Institute of Technology Madras (IIT Madras)	Semiconductor Optoelectronics	Prof. Andrew Thangaraj	April - 2018
NPTEL Online Certification Course	Indian Institute of Technology Kharagpur (IIT Kharagpur)	Solid State Physics	Prof. Adrijit Goswami	October - 2018
NPTEL Online Certification Course	Indian Institute of Technology Kharagpur (IIT Kharagpur)	Experimental Physics - II	Prof. Amal Kumar Das	April – 2022
NPTEL Online Certification Course	Indian Institute of Technology Kharagpur (IIT Kharagpur)	Experimental Physics - III	Prof. Amal Kumar Das	April – 2022
NPTEL Online Certification Course	Indian Institute of Technology Kanpur (IIT Kanpur)	Bioelectrochemistry	Prof. Mainak Das	April – 2022

AWARDS AND ACHIEVEMENTS:

- 2018-2022: Successfully Qualified **Gujarat State Eligibility Test for Assistant Professor (GSET)** conducted by The Maharaj Saiyajirao University of Baroda (MSU Baroda) three times in **December-2018, March - 2020** and **March - 2022**.
- 2021: Reviewed 3 Research Papers in Peer-reviewed International Journals (Springer, IOP,etc.).
- 2021: Completed **Ph.D.** in Physics with the Thesis title: "Synthesis and Characterizations of $Cu_xSn_{1-x}Se$ (x = 0.0, 0.2, 0.4, 0.6, 0.8, 1.0) ternary alloy single crystals"
- 2017-2022: Received **National Fellowship for OBC Candidates Award from University Grants Commission (UGC), New Delhi** for a tenure of 5 years from April 2017 to March 2022.
- 2017-2023: Published **23 Research papers** in international peer reviewed Journals.
- 2017-2022: Participated in **36 International/ National/ State level Conferences/Seminars/ Workshops**.
- 2017-2022: Participated and **Presented Research papers at 32 different International-National-State-Local level Conferences/Symposium/Workshops**.
- 2022: **Best Paper Award** at 3rd Indo-Korea Virtual conference on Development of Advanced Materials for Future Technologies (DAMFT - 2022).
- 2021: **Best Paper Presentation Award** at 2nd International Symposium on Modelling of Crystal Growth Processes and Devices (MCGPD-2021).
- 2021: **Best Paper Presentation Award** at International Conference on Sustainable Materials and Technologies for Bio and Energy Applications (SMTBEA-2021).
- 2021: Received **Best Paper Award** at International Virtual Conference on Energy Conversion and Storage (ICECS-2K21).
- 2020: Received **Best Poster Award** at International Conference on Smart and Nano Materials – 2020 (ICSMN-2020), Pandharpur.
- 2020: Received **5th position and cash prize for Best Oral presentation** at ECOZ Online Symposium.
- 2021: 2021: **Best Paper and Poster Presentation Award (3)** co-authored abstracts at International Conferences SGCA-2021, ETiFON-2021 and ICECS-2K21.

- 2019: Qualified written exam of **GPSC Assistant Professor in Physics (Advt: 90/2018-19).**
- 2019: Received **Appreciation Prize for participating in Talent Evening Programme** at Department of Physics, Sardar Patel University, Vallabh Vidyanagar during February – 2019.
- 2018: Received **Best Paper Award** at National Conference on Physics and Chemistry of Materials (NCPCM-2018), Indore.
- 2018: Received **2nd prize in Best Poster Award** at National Research Scholar Meet on Condensed Matter Physics and Materials Science (CMPMS-18).
- 2017: Secured **University 2nd rank out 7 students in M.Phil. (Physics)** at Sardar Patel University.
- 2016: Secured **First Class with B Grade in M.Sc. (Physics)** at Sardar Patel University.
- 2016: Secured **University 4th rank out 93 students in M.Sc. (Physics)** at Sardar Patel University.
- 2014: Secured **First Class with O Grade in B.Sc. (Physics)** at Sardar Patel University.
- 2014: Secured **University 3rd rank out 45 students in B.Sc. (Physics)** at Sardar Patel University.
- 2016: Received **3rd position in ESSAY Competition** held at Department of Physics, Sardar Patel University, Vallabh Vidyanagar during 2015-16.
- 2015: Qualified **Minaxi Lalit Science Award – 2015 and received 3rd rank** conducted by Gujarat Science Academy.
- 2015-2019: Participated in **Successive Talent Evening Programmes** held at Department of Physics, Sardar Patel University.
- 2011-2013: Participated in **Personality Development Programme** conducted by Globarena and H M Patel Carrer Development Centre at Vallabh Vidyanagar, Gujarat during 2011-12 and 2012-13.

Research Publications:

Total number of publications: 26
Google Scholar Profile link: https://scholar.google.com/citations?user=iIOHi2sAAAAJ&hl=en
ResearchGate Profile link: https://www.researchgate.net/profile/Kunjal_Patel4
VIDWAN: https://vidwan.inflibnet.ac.in/profile/278214
Linkedin Profile link: https://www.linkedin.com/in/kunjal-patel-12b059164/
ORCID ID: https://orcid.org/0000-0002-9712-3503

1. X-ray Diffraction Analysis of Hexagonal Klockmannite CuSe Nanoparticles for Photodetectors under UV Light
   Kunjal Patel*, G. K. Solanki*, K. D. Patel, and V. M. Pathak
   The Journal of Physical Chemistry C *125, 6, 3517–3526* ***(2021)*** **(I.F.: 4.177)**
   DOI: 10.1021/acs.jpcc.0c09353 **(ISSN: 1932-7455)** (08-02-2021)

2. Orthorhombic SnSe Nanocrystals for Visible Light Photodetectors
   Kunjal Patel*, Payal Chauhan, Alkesh B. Patel, G. K. Solanki*, K. D. Patel and V. M. Pathak
   ACS Applied Nano Materials *3, 11, 11143–11151* ***(2020)*** **(I.F.: 6.140)**
   DOI: 10.1021/acsanm.0c02301 **(ISSN: 2574-0970)** (22-10-2020)

3. Photocatalytic degradation of Methylene Blue and Crystal Violet dyes under UV light irradiation by sonochemically synthesized CuSnSe nanocrystals
   Kunjal Patel*, Tarun Parangi, G. K. Solanki*, M. K. Mishra, K. D. Patel and V. M. Pathak.
   The European Physical Journal Plus 136: 743 ***(2021)*** **(I.F.: 3.758)**
   DOI: 10.1140/epjp/s13360-021-01725-0 **(ISSN: 2190-5444)** (12-07-2021)

4. Study of liquid-phase ultrasonically exfoliated $Cu_{0.4}Sn_{0.6}Se$ ternary alloy nanoparticles-based photodetector

Kunjal Patel*, Anand Patel, Vibhutiba P. Jethwa, G. K. Solanki*, K. D. Patel, V. M. Pathak ***Journal of Materials Science: Materials in Electronics*** *33 8361–8367* ***(2022)*** **(I.F.: 2.779)** DOI: 10.1007/s10854-021-06188-8 **(ISSN: 1573-482X)** (22-05-2021)

5. Investigation of Optical, Electrical and Optoelectronic properties of SnSe crystals
Kunjal Patel*, Gunvant Solanki, Kireetkumar Patel, Vivek Pathak and Payal Chauhan
The European Physical Journal B *92: 200* ***(2019)*** **(I.F.: 1.398)**
DOI: 10.1140/epjb/e2019-100306-8 **(ISSN: 1434-6036)** (09-09-2019)

6. Synthesis and Photodetection Properties of Sonochemically Exfoliated $Cu_{0.2}Sn_{0.8}Se$ Nanoparticles
Kunjal Patel*, G.K. Solanki, K.D. Patel, V.M. Pathak, Payal Chauhan, Anand Patel
Journal of Nano- and Electronic Physics *Vol. 12 No 2, 02005(5pp)* ***(2020)***
DOI: 10.21272/jnep.12(2).02005 **(ISSN: 2306-4277)** (25-04-2020)

7. X-ray diffraction analysis of orthorhombic SnSe nanoparticles by Williamson–Hall, Halder–Wagner and Size–Strain plot methods
Kunjal Patel*, Anand Patel, Vibhutiba P. Jethwa, Hetal Patel, G.K. Solanki
Chemical Physics Impact, Volume 8, 100547 ***(2024)***
DOI: 10.1016/j.chphi.2024.100547 **(ISSN 2667-0224)** (27-02-2024)

8. Enhanced electrical and optoelectronic performance of SnS crystal by Se doping
Vibhutiba P. Jethwa*, **Kunjal Patel**, V. M. Pathak, G. K. Solanki
Journal of Alloys and Compounds *883 160941* ***(2021)*** **(I.F.: 6.371)**
DOI: 10.1016/j.jallcom.2021.160941 **(ISSN: 0925-8388)** (25-06-2021)

9. Temperature-dependent vibrational properties of DVT grown orthorhombic SnS single crystals and their application as a self-powered photodetector
Vibhutiba P. Jethwa*, **Kunjal Patel**, Narayan Som, Vivek M. Pathak, Kireetkumar D. Patel*, Gunvant K. Solanki and Prafulla K. Jha
Applied Surface Science *531 147406* ***(2020)*** **(I.F.: 7.392)**
DOI: 10.1016/j.apsusc.2020.147406 **(ISSN: 0169-4332)** (01-08-2020)

10. Investigation of structural, electrical and optical properties of $SnS_{0.75}Se_{0.25}$ ternary alloy crystals
Vibhutiba P. Jethwa*, **Kunjal Patel**, V. M. Pathak, G. K. Solanki
Journal of Material Science: Material in Electronics *33 8734–8740* ***(2022)*** **(I.F.: 2.779)**
DOI: 10.1007/s10854-021-06775-9 **(ISSN: 1573-482X)** (11-08-2021)

11. Anisotropic Study of Photo-Bolometric Effect in $Sb_{0.15}Ge_{0.85}Se$ Ternary Alloy at Low Temperature
Chaitanya Limberkar*, Anand Patel, **Kunjal Patel**, Salil Nair, Jolly Joy, K. D. Patel, G. K. Solanki, V. M. Pathak
Journal of Alloys and Compounds *846 156391* ***(2020)*** **(I.F.: 6.371)**
DOI: 10.1016/j.jallcom.2020.156391 **(ISSN: 0925-8388)** (21-07-2020)

12. Solution-Processed Uniform $MoSe_2$-WSe_2 Heterojunction Thin Film on Silicon Substrate for Superior and Tunable Photodetection
Alkesh B. Patel*, Payal Chauhan, **Kunjal Patel**, Challappally Kesav Sumesh, Som Narayan, Kireetkumar D. Patel*, Gunvant K. Solanki, Vivek M. Pathak, Prafulla K. Jha, and Vikas Patel
ACS Sustainable Chemistry & Engineering *8, 12, 4809-4817* ***(2020)*** **(I.F.: 9.224)**
DOI: 10.1021/acssuschemeng.9b07449 **(ISSN: 2168-0485)** (13-03-2020)

13. Investigation of anisotropic photoresponse in $Re_{0.2}Sn_{0.8}Se_2$ ternary alloy at low temperature conditions
Payal Chauhan*, Alkesh B. Patel, **Kunjal Patel**, Anand Patel, G. K. Solanki, K. D. Patel & V. M. Pathak
Journal of Material Science: Material in Electronics *31, 11123–11130* ***(2020)*** **(I.F.: 2.779)**
DOI: 10.1007/s10854-020-03661-8 **(ISSN: 1573-482X)** (29-05-2020)

14. Low Temperature Anisotopic Photoresponse Study of Bulk ZrS_3 Single Crystal
Anand Patel*, Chaitanya Limberkar, **Kunjal Patel**, Sanjay Bhakhar, K. D. Patel*, G. K. Solanki, V. M. Pathak
Sensors and Actuators A: Physical *331 112969* ***(2021)*** **(I.F.: 4.291)**
DOI: 10.1016/j.sna.2021.112969 **(ISSN: 0924-4247)** (28-07-2021)

15. Tunable anisotropic pulse photo response of ZrS_3 crystal at cryogenic temperatures
Anand Patel*, **Kunjal Patel**, Chaitanya Limberkar, Vibhutiba Jethwa, K. D. Patel*, G. K. Solanki, V. M. Pathak
Physica B: Condensed Matter *633 413775* ***(2022)*** **(I.F.: 2.988)**
DOI: 10.1016/j.physb.2022.413775 **(ISSN: 0921-4526)** (15-02-2022)

16. Wavelength Dependent Anisotropic Photo Sensing Activity of Zirconium Trisulfide Crystal
Anand Chunilal Patel*, **Kunjal Patel**, Chaitanya Limberkar, K. D. Patel*, G. K. Solanki, V. M. Pathak
Journal of Materials Science: Materials in Electronics *33 8417–8425* ***(2022)*** **(I.F.: 2.779)**
DOI: 10.1007/s10854-021-06312-8 **(ISSN: 1573-482X)** (11-06-2021)

17. Temperature Dependent I-V Characteristics of In/p-SnSe Schottky diode
Hetal Patel*, **Kunjal Patel**, Abhishek Patel, Hiren Jagani, K. D. Patel*, G. K. Solanki, V. M. Pathak
Journal of Electronic Materials *50, 5217–5225* ***(2021)*** **(I.F.: 2.047)**
DOI: 10.1007/s11664-021-09043-y **(ISSN: 0361-5235)** (11-06-2021)

18. Tunable and anisotropic photoresponse of layered $Re_{0.2}Sn_{0.8}Se_2$ ternary alloy
Payal Chauhan*, G. K. Solanki, Alkesh B. Patel, **Kunjal Patel**, Pratik Pataniya, Som Narayan, K.D. Patel, P.K. Jha, V.M. Pathak
Solar Energy Materials and Solar Cells *200 109936* ***(2019)*** **(I.F.: 7.305)**
DOI: 10.1016/j.solmat.2019.109936 **(ISSN: 0927-0248)** (15-05-2019)

19. High-performance self-biased photodetectors based on Bi-incorporated $ReSe_2$ ternary alloys
Hetal Patel*, **Kunjal Patel**, K.D. Patel
Optical Materials, *137, 113559* **(2023) (I.F.: 3.754)**
DOI: 10.1016/j.optmat.2023.113559 **(ISSN: 1873-1252)** (16-02-2023)

20. Investigations of $SnS_{0.5}Se_{0.5}$ ternary alloy crystals for their device application
Vibhutiba P. Jethwa*, **Kunjal Patel**, V.M. Pathak
Optical Materials, *140, 113835* **(2023) (I.F.: 3.754)**
DOI: 10.1016/j.optmat.2023.113835 **(ISSN: 1873-1252)** (27-04-2023)

21. Structural, electrical, and optical properties of DVT-grown SnX (X = S, Se) crystals
Vibhutiba P. Jethwa*, **Kunjal Patel**, Anand Patel, V.M. Pathak
Journal of Materials Science: Materials in Electronics 34:1510 ***(2023)*** **(I.F.: 2.779)**
DOI: 10.1007/s10854-023-10912-x **(ISSN: 1573-482X)** (11-07-2023)

22. Large Negative Magnetoresistance in Non-Magnetic Tin Monoselenides
S. M. Bharthaniya*, Ajay M Agarwal, **Kunjal Patel**, G. K. Solanki
International Journal of Advanced Science and Technology *Vol. 29, No. 04, pp. 6853 –6860* ***(2020).***

(ISSN: 2207-6360) (01-07-2020)

23. Flat band potential determination of $NbSe_2$ photoelectrode using Mott-Schottky plot
Kunjal Patel*, G. K. Solanki, K. D. Patel, Pratik Pataniya, V. M. Pathak, Mohit Tannarana, Payal Chauhan, and Megha Patel
AIP Conference Proceedings *2115, 030402* ***(2019)***
DOI: 10.1063/1.5113241 **(ISSN: 1551-7616)** (12-07-2019)

24. Optoelectronic devices based on chemical vapour transport grown $NbSe_2$ crystals
Kunjal Patel*, G. K. Solanki, K. D. Patel, Pratik Pataniya, Mohit Tannarana, and Payal Chauhan
AIP Conference Proceedings *2100, 020130* ***(2019)***
DOI: 10.1063/1.5098684 **(ISSN: 1551-7616)** (25-04-2019)

25. Growth and photo-response of $NbSe_2$ and NbS_2 crystals
Kunjal Patel*, G. K. Solanki, Pratik Pataniya and K. D. Patel
AIP Conference Proceedings *1961, 030021* ***(2018)***
DOI: 10.1063/1.5035223 **(ISSN: 1551-7616)** (11-05-2018)

26. PEC solar cell behaviour of $NbSe_2$ and NbS_2 single crystals grown by DVT technique
Kunjal Patel*, G.K. Solanki, Pratik Pataniya, K.D. Patel, V.M. Pathak and Mohit Tannarana
Research Journal of Physical Sciences*, Vol. 5(7), 1-7, September* ***(2017)*** **(ISSN: 2320 – 4796)** (04-09-2017)

Poster/Oral Presentation/Abstracts in Scientific Conferences/Workshops/Seminars:

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1. **Title:** Study of liquid-phase ultrasonically exfoliated $Cu_{0.4}Sn_{0.6}Se$ ternary alloy nanoparticles-based photodetector; **Authors: Kunjal Patel***, G. K. Solanki*, K. D. Patel, V. M. Pathak, Anand Patel; **Presented at:** 6th International Conference on Nanoscience and Nanotechnology (ICONN-2021) (Virtual Conference) February 01-03, 2021, organized by Department of Physics and Nanotechnology, SRM Institute of Science and Technology (SRMIST), Kattankulathur, Chennai – 603203, Tamil Nadu - India in association with Shizuoka University- Japan and NCTU-Taiwan, GNS-New Zealand, ACCMS, Indian Physics Association, ICS India, Tata Institute of Fundamental Research India, RMIT University Australia and Springer Nature is organizing this edition of ICONN.

2. **Title:** Investigation of Optical, Electrical and Optoelectronic properties of SnSe crystals; **Authors: Kunjal Patel***, G. K. Solanki, Pratik Pataniya, K. D. Patel, V. M. Pathak, Mohit Tannarana, Payal Chauhan; **Presented at:** International Conference on Materials & Technologies for Energy Conversion and Storage (M-TECS 2018), September 26-29, 2018, organized by Bhabha Atomic Research Centre in association with Materials Research Society of India - Mumbai Chapter at DAE Convention Centre, Anushaktinagar, Bhabha Atomic Research Centre, Mumbai - 400085, Maharashtra, India.

3. **Title:** Electrical Anisotropy measurements in SnSe crystals; **Authors: Kunjal Patel***, G. K. Solanki, K. D. Patel, V. M. Pathak, Pratik Pataniya, Mohit Tannarana, Payal Chauhan **(BEST POSTER AWARD (2nd Prize); Presented at:** National Research Scholar Meet on Condensed Matter Physics and Materials Science (CMPMS-18) on 8th December 2018, jointly organised by Department of Physics, University School of Sciences, Gujarat University, Ahmedabad and Gujarat Science Academy, Ahmedabad sponsored by GUJCOST, Gandhinagar. Publication Partner Knowledge Consortium of Gujarat, Gandhinagar.

4. **Title:** Photodetection properties of sonochemically exfoliated $Cu_{0.2}Sn_{0.8}Se$ Nanoparticles; **Authors:** **Kunjal Patel***, G. K. Solanki, K. D. Patel, V. M. Pathak, Payal Chauhan; **Presented at:** Symposium on 2D Materials and Devices, 27-28 September 2019 **j**ointly Organized by Indian Institute of Technology Jodhpur & Indian National Young Academy of Science at IIT Jodhpur, Rajasthan, India.

5. **Title:** Synthesis and Photodetection properties of sonochemically exfoliated $Cu_{0.2}Sn_{0.8}Se$ Nanoparticles; **Authors: Kunjal Patel***, G. K. Solanki, K. D. Patel, V. M. Pathak, Payal Chauhan, Anand Patel **(BEST POSTER AWARD); Presented at:** International Conference on Smart Materials and Nanotechnology (ICSMN-2020), 2nd - 4th January 2020 organized by Department of Engineering Physics and Chemistry, SKN SINHGAD COLLEGE OF ENGINEERING, Korti, Pandharpur, Maharashtra, India. (Affiliated to Punyashlok Ahilyadevi Holkar Solapur University, Solapur; Approved by DTE, Govt. of Maharashtra and AICTE).

6. **Title:** Synthesis and Photodetection properties of sonochemically exfoliated $Cu_{0.5}Sn_{0.5}Se$ Nanoparticles; **Authors: Kunjal Patel***, G. K. Solanki, K. D. Patel, V. M. Pathak, Anand Patel **((BEST ORAL PRESENTATION) (5th Position and Cash Prize)); Presented at:** ECOZ Online Symposium, 30th and 31st January 2020 held in Styvalley Cloud Platform organized by BioLim Centre for Science & Technology, Chennai, TN, India.

7. **Title:** ANISOTROPY MEASUREMENTS IN $NbSe_2$ and NbS_2 CRYSTALS; **Authors:** G. K. Solanki*, **Kunjal Patel**, Pratik Pataniya, Mohit Tannarana, K.D. Patel and V. M. Pathak; **Presented at:** XXXI GUJARAT SCIENCE CONGRESS (GSC-2017) on 4th and 5th February 2017 at Pandit Deendayal Petroleum University Campus, Gandhinagar - 382007, Gujarat, India.

8. **Title:** PEC solar cell behaviour of $NbSe_2$ and NbS_2 single crystals grown by DVT technique; **Authors:** **Kunjal Patel***, G. K. Solanki, Pratik Pataniya, Mohit Tannarana, K. D. Patel and V. M. Pathak; **Presented at:** National Workshop on Analytical Techniques for Material Characterization (NWATMC-2017) on 20th March 2017 at Department of Physics, Sardar Patel University, Vallabh Vidyanagar - 388120, Gujarat, India.

9. **Title:** PEC solar cell behaviour of $NbSe_2$ and NbS_2 single crystals grown by DVT technique; **Authors:** **Kunjal Patel***, G. K. Solanki, Pratik Pataniya, K. D. Patel, V. M. Pathak and Mohit Tannarana; **Presented at:** 3rd International Young Scientist Congress (IYSC-2017) & Workshop on Scientific Writing on 8th - 9th May 2017 at Ganpat University, Mehsana - 384012, Gujarat, India.

10. **Title:** Photoelectrochemical Solarcell Studies; **Authors: Kunjal Patel***, G. K. Solanki, Pratik Pataniya, K. D. Patel, V. M. Pathak and Mohit Tannarana; **Presented at:** 4th International Virtual Congress (IVC-2017) & Workshop on Statistical Skills, 5th to 10th August 2017 organized by International Science Community Association (ISCA).

11. **Title:** Growth and Photo-response of $NbSe_2$ and NbS_2 Crystals; **Authors: Kunjal Patel***, G. K. Solanki, Pratik Pataniya and K. D. Patel; **Presented at:** International Conference on Nanomaterials for Energy Conversion and Storage Applications (NECSA – 2018), 29th -31st January 2018 at Solar Research and Development Center, Pandit Deendayal Petroleum University, Gandhinagar - 382 007, Gujarat, India.

12. **Title:** PEC Solarcell Studies; **Authors: Kunjal Patel***, G. K. Solanki, Pratik Pataniya, K. D. Patel, V. M. Pathak and Mohit Tannarana; **Presented at:** 4th International Virtual Congress (IVC-2018) &

Workshop on Personality Development, 5th to 10th August 2018, organized by International Science Community Association (ISCA).

13. **Title:** Photoelectrochemical response of CVT grown $NbSe_2$ crystals; **Authors: Kunjal Patel***, G. K. Solanki, K. D. Patel, Pratik Pataniya, Mohit Tannarana and Payal Chauhan; **Presented at:** Student Conference on Optics and Photonics (SCOP-2018), October 4-6, 2018, organized by OSA - PRL Student Chapter, AMOPH Division, Physical Research Laboratory, Navarangpura, Ahmedabad – 380009, Gujarat, India.

14. **Title:** Flat Band potential determination of $NbSe_2$ photoelectrode using Mott-Schottky plot; **Authors: Kunjal Patel***, G. K. Solanki, K. D. Patel, Pratik Pataniya, V. M. Pathak, Mohit Tannarana, Payal Chauhan and Megha Patel; **Presented at:** 63rd DAE-Solid State Physics Symposium (DAESSPS-2018), December 18-22, 2018 at Guru Jambheshwar University of Sci. & Tech., Hisar, Haryana, India, organised by Bhabha Atomic Research Centre, Mumbai, India sponsored by Board of Research in Nuclear Sciences, Department of Atomic Energy, Government of India.

15. **Title:** PEC behaviour of CVT grown $NbSe_2$ crystals as photoelectrode; **Authors: Kunjal Patel***, G. K. Solanki, K. D. Patel, Pratik Pataniya, Mohit Tannarana and Payal Chauhan **(BEST POSTER AND PAPER AWARD)**; **Presented at:** National Conference on Physics and Chemistry of Materials (NCPCM-2018), December 27-28, 2018 organized by Department of Physics, Govt. Holkar Science College, Indore and School of Physics, Devi Ahilya University, Indore, Madhya Pradesh, India.

16. **Title:** Visible light photodetector and electrochemical photovoltaic study of SnSe single crystals; **Authors: Kunjal Patel***, Anand Patel, Vibhutiba P. Jethwa; **(BEST PAPER AWARD); Presented at:** International Virtual Conference on Energy Conversion and Storage (ICECS-2K21), April 20 & 21 Organized by Department of Physics, PPG College of Arts and Science, Coimbatore-641035, Tamil Nadu, India, In Collaboration with Indian Association for Crystal Growth (IACG).

17. **Title:** Visible Light Active Photodetection and Photoelectrochemical Photovoltaic Study of Orthorhombic SnSe Single Crystals; **Authors: Kunjal Patel***, Anand Patel, Vibhutiba P. Jethwa; **(BEST PAPER PRESENTATION AWARD); Presented at:** International Conference on Sustainable Materials and Technologies for Bio and Energy Applications (SMTBEA-2021) 19-21 May 2021, Organized by Department of ECE, SSN College of Engineering and SSN Research Centre, Kalavakkam, Chennai –603110, Tamilnadu, India, In association with Indian Association for Crystal Growth & Indian Science and Technology Association (Elavenilorganization). (POSTER PRESENTATION)

18. **Title:** X-ray diffraction analysis of Hexagonal Klockmannite CuSe nanoparticles and its UV photodetection property; **Authors: Kunjal Patel***, Anand Patel, Vibhutiba P. Jethwa; **Presented at:** 8th Interdisciplinary Symposium on Materials Chemistry (ISMC-2020), June 17-19, 2021, Bhabha Atomic Research Centre, Mumbai – 400085, INDIA, Organized by: Chemistry Division, BARC Board of Research in Nuclear Sciences, Mumbai – 400085, INDIA, Supported by : Department of Atomic Energy & Government of India, Society for Materials Chemistry, Mumbai Mumbai – 400085, INDIA. (POSTER PRESENTATION)

19. **Title:** Orthorhombic SnSe Single Crystals for Visible Light Photodetection and Photoelectrochemical Photovoltaic Study; **Authors: Kunjal Patel***, Anand Patel, Vibhutiba P. Jethwa; **Presented at:** 8th Interdisciplinary Symposium on Materials Chemistry (ISMC-2020), June 17-19, 2021, Bhabha Atomic Research Centre, Mumbai – 400085, INDIA, Organized by: Chemistry Division, BARC Board of

Research in Nuclear Sciences, Mumbai – 400085, INDIA, Supported by : Department of Atomic Energy & Government of India, Society for Materials Chemistry, Mumbai Mumbai – 400085, INDIA. (POSTER PRESENTATION)

20. **Title:** Sonochemically exfoliation and photodetection properties of Cu0.2Sn0.8Se Nanoparticles; **Authors: Kunjal Patel***, Anand Patel, Vibhutiba P. Jethwa; **Presented at:** 8th Interdisciplinary Symposium on Materials Chemistry (ISMC-2020), June 17-19, 2021, Bhabha Atomic Research Centre, Mumbai – 400085, INDIA, Organized by: Chemistry Division, BARC Board of Research in Nuclear Sciences, Mumbai – 400085, INDIA, Supported by : Department of Atomic Energy & Government of India, Society for Materials Chemistry, Mumbai Mumbai – 400085, INDIA. (POSTER PRESENTATION)

21. **Title:** Orthorhombic SnSe Single Crystals for Photovoltaic and Photodetection applications **Authors: Kunjal Patel***, Anand Patel, Vibhutiba P. Jethwa; **(BEST PAPER PRESENTATION AWARD); Presented at:** 2nd International Symposium on Modeling of Crystal Growth Processes and Devices (MCGPD-2021) 5-8, July 2021, Organized by SSN Research Center, SSN College of Engineering, SSN Institutions, Kalavakkam, Chennai-603110, Tamilnadu, India, In association with Indian Association for Crystal Growth & Indian Science and Technology Association International Organization for Crystal Growth. (ORAL PRESENTATION)

22. **Title:** Synthesis, Characterizations, X-ray diffraction analysis and UV photodetection application of Hexagonal Klockmannite CuSe nanoparticles; **Authors: Kunjal Patel***, Anand Patel, Vibhutiba P. Jethwa; **Presented at:** 2nd International Symposium on Modeling of Crystal Growth Processes and Devices (MCGPD-2021) 5-8, July 2021, Organized by SSN Research Center, SSN College of Engineering, SSN Institutions, Kalavakkam, Chennai-603110, Tamilnadu, India, In association with Indian Association for Crystal Growth & Indian Science and Technology Association International Organization for Crystal Growth. (ORAL PRESENTATION)

23. **Title:** Synthesis and Characterizations of $Cu_xSn_{1-x}Se$ (x = 0.0, 0.2, 0.4, 0.6, 0.8, 1.0) ternary alloy single crystals; **Author: Dr. Kunjal Sureshchandra Patel; Thesis Presented at:** International Conference on Solution Grown Crystals and Their Useful Applications (SGCA-2021), 13-15 September 2021, Organized by SSN Research Centre, SSN Institutions (Autonomous) Chennai-603110, Tamil Nadu, India in association with Indian Association for Crystal Growth (IACG). (ORAL Thesis PRESENTATION)

24. **Title:** SnSe single crystal based visible light Photodetector and Electrochemical Photovoltaic cell; **Authors: Kunjal Patel***, Anand Patel, Vibhutiba P. Jethwa; **Presented at:** "International Conference On Advanced Materials And Mechanical Characterization (ICAMMC-2021)" (VIRTUAL MODE, 2- 4 December 2021), organized by the Department of Physics and Nanotechnology and Department of Mechanical Engineering, SRM Institute Of Science And Technology in association with the Indian Institute Of Science (IISc), Indian Institute of Technology (IIT) Delhi, IIT Madras, IIT Hyderabad, IIT Indore, Indian Institute Of Metals Chennai Chapter, ASM International Chennai Chapter, Indian Ceramic Society, Indian Physics Association, and American Ceramic Society India Chapter. (POSTER PRESENTATION)

25. **Title:** Synthesis, Characterizations, X-ray diffraction analysis Hexagonal Klockmannite CuSe nanoparticles for its photodetection application under UV light; **Authors: Kunjal Patel***, Anand Patel, Vibhutiba P. Jethwa; **Presented at:** "International Conference On Advanced Materials And Mechanical

Characterization (ICAMMC-2021)" (VIRTUAL MODE, 2- 4 December 2021), organized by the Department of Physics and Nanotechnology and Department of Mechanical Engineering, SRM Institute Of Science And Technology in association with the Indian Institute Of Science (IISc), Indian Institute of Technology (IIT) Delhi, IIT Madras, IIT Hyderabad, IIT Indore, Indian Institute Of Metals Chennai Chapter, ASM International Chennai Chapter, Indian Ceramic Society, Indian Physics Association, and American Ceramic Society India Chapter. (POSTER PRESENTATION)

26. **Title:** Hexagonal Klockmannite CuSe nanoparticles: Synthesis, Characterizations, X-ray diffraction analysis and its UV photodetection application; **Authors: Kunjal Patel*,** Anand Patel, Vibhutiba P. Jethwa; **Presented at:** International Symposium on Nanoscience and its Applications (ISNA) on December 2-3, 2021, organized by the collaborating research groups of the e-Asia Joint Research Program: Tokyo University of Science (TUS), Islamic University of Indonesia, Hokkaido University, Ministry of Science and Technology of Vietnam, MSU-Iligan Institute of Technology, Philippines, and the Samahang Pisika ng Visayas at Mindanao, with Prof. Kazuo Umemura of Tokyo University of Science as the Symposium Director and e-Asia JRP Principal Leader. (ORAL PRESENTATION)

27. **Title:** SnSe single crystals: A solid state photodetector and electrochemical photovoltaic study; **Authors: Kunjal Patel*,** Anand Patel, Vibhutiba P. Jethwa; **Presented at:** Solid-State Science & Research 2021, 10^{th} - 11^{th} June 2021, Zagreb, Croatia Organized by Ruđer Bošković Institute, Department of Chemistry, Faculty of Science, Department of Physics, Faculty of Science, Institute of Physics, Zagreb, Croatia. (ORAL PRESENTATION)

28. **Title:** Photocatalytic degradation of Methylene Blue and Crystal Violet dyes under UV light irradiation by sonochemically synthesized CuSnSe nanocrystals; **Authors: Kunjal Patel*,** Anand Patel, Vibhutiba P. Jethwa; **Presented at:** 2^{nd} Virtual International Conference on Hierarchically Structured Materials (ICHSM - 2022) 8-10 April 2022 Organized by Department of Physics, SRM Institute of Science and Technology Ramapuram Campus, Chennai-600089. (ORAL PRESENTATION)

29. **Title:** Photocatalytic performance of sonochemically synthesized $Cu_xSn_{1-x}Se$ nanocrystals for dye Degradation; **Authors: Kunjal Patel*,** Anand Patel, Vibhutiba P. Jethwa; (**BEST PAPER AWARD) Presented at:** 3^{rd} Indo-Korea Virtual conference on Development of Advanced Materials for Future Technologies (DAMFT - 2022) during 22^{nd} & 23^{rd} April 2022 jointly organized by KAIST, Daejeon, South Korea & Vellore Institute of Technology, Chennai, India. (ORAL PRESENTATION)

30. **Title:** Electrochemical Photovoltaic cell and Photodetector based on Tin Selenide single crystals; **Authors: Kunjal Patel*,** Anand Patel, Vibhutiba P. Jethwa; **Presented at:** International Conference on Emerging Photovoltaic Materials and Technologies (ICEPV - 2022) VIRTUAL MODE during 27^{th} - 29^{th} April 2022 organised by Baskent University, Ankara, Turkey. (ORAL PRESENTATION)

31. **Title:** The Excitement and Current Research Scenario in Physics; **Authors: Kunjal Patel; Presented at:** The Excitement and Current Research Scenario in Physics (ECRSP – 2013) on 27^{th} January 2013 organised by Department of Physical Sciences, PDPIAS - P D Patel Institute of Applied Sciences, Charotar University of Science and Technology (CHARUSAT), Changa, India. (POSTER PRESENTATION)

32. **Title:** Sustainable Recharging of Electrical Gadgets; **Authors: Kunjal Patel,** Jugal Patel; **Presented at:** Student Research Convention (ANVESHAN-2012) of Association of Indian Universities held on 6^{th}

February 2013 at Gyanoday Bhavan organised by Sardar Patel University, Vallabh Vidyanagar, Gujarat, India. (POSTER PRESENTATION)

33. **Title:** $Cu_xSn_{1-x}Se$ nanocrystals: Sonochemical synthesis, Characterizations and Photocatalytic performance for dye Degradation; **Authors: Kunjal Patel*,** Anand Patel, Vibhutiba P. Jethwa; **Presented at:** 2nd International Conference on "Sustainable Materials and Technologies for Bio and Energy Applications SMTBEA-2022", during 13th - 15th , July 2022 Organized by SSN Institutions, Kalavakkam, Chennai-603110, in association with Elavenil Science Association & Indian Science and Technology Association. (POSTER PRESENTATION)

34. **Title:** XRD analysis and UV photodetection property of Copper Selenide nanoparticles; **Authors: Kunjal Patel*,** Anand Patel, Vibhutiba P. Jethwa; **Presented at:** International Conference on Functional Material and Nanotechnology (ICFMN- 2K22)", during 20-21 July, 2022 organized by Department of Physics, Nehru Institute of Technology, Coimbatore in collaboration with Indian Association for Crystal Growth. (POSTER PRESENTATION)

35. **Title:** Copper doped Tin Selenide nanocrystals for Photocatalytic degradation; **Authors: Kunjal Patel*,** Anand Patel, Vibhutiba P. Jethwa; **Presented at:** 7th International Conference on Nanoscience and Nanotechnology (ICONN-2023) organized by Department of Physics and Nanotechnology, SRM IST, India during March 27- 29, 2023, in association with Shizuoka University, Japan; National Yang Ming Chiao Tung University, Taiwan; GNS Science, New Zealand; University of Rome Tor Vergata, Italy; Asian Consortium on Computational Materials Science (ACCMS), Japan; Indian Ceramic Society; Indian Physics Association (IPA); Solar Energy Society of India (SESI); Innovation, Science & Technology Foundation - Tirupati (ISTF-T) and co-sponsored by Defence Research and Development Organization (DRDO), India; Council of Scientific & Industrial Research (CSIR), India; The Indian Science Congress Association (ISCA) and Springer Nature. (POSTER PRESENTATION)

36. **Title:** Crystallite size analysis and Optoelectronic properties of Copper Selenide nanoparticles; **Authors: Kunjal Patel*,** Anand Patel, Vibhutiba P. Jethwa; **Presented at:** International Hybrid Conference on Nano Structured Materials and Polymers (ICNP 2023) May 12-14, 2023 at Mahatma Gandhi University, Kottayam, Kerala, India organized by International and Inter University Center for Nanoscience and Nanotechnology (IIUCNN), Mahatma Gandhi University, Kottayam, Kerala, India & School of Energy Materials (SEM), Mahatma Gandhi University, Kottayam, Kerala, India & Indian Institute of Space Science and Technology (IIST), & University of Johannesburg, Doornfontein, Johannesburg, South Africa & Wroclaw University of Technology, Poland & Gdansk University of Technology, Poland & IJL, University of Lorraine, Nancy, France. (POSTER PRESENTATION)

37. **Title:** Pulse Photo Response of S doped ZrSe Single Crystal; **Authors:** Anand Patel*, Sanket Patel, **Kunjal Patel**, Chetan Zankat, K. D. Patel, G. K. Solanki and V. M. Pathak; **Presented at:** Two days National conference on STEM (Science, Technology, Engineering and Mathematics) cSTEM'19 during September 27-28, 2019 Organized by Department of Applied Science and humanities, G. H. Patel College of Engineering & Technology (GCET) in collaboration with Department of Physics and Department of Mathematics, Sardar Patel University, Vallabh Vidyanagar, Gujarat.

38. **Title:** Photoelectrochemical studies of lead doped SnSe crystals grown by direct vapour transport technique; **Authors:** Anand P. Khambholiya*, Anand P. Joshi, G.K.Solanki & **Kunjal Patel**; **Presented at:** One Day National Seminar on Recent Trends in Experimental Condensed Matter Physics (RTECMP

2017) on 21st March 2017 at Department of Physics, Saurashtra University, Rajkot - 360005, Gujarat, India.

39. **Title:** Synthesis and photoelectrochemical studies of SnSe crystals; **Authors:** Anand P. Joshi*, Anand P. Khambholiya, G. K. Solanki & **Kunjal Patel**; **Presented at:** One Day National Seminar on Recent Trends in Experimental Condensed Matter Physics (RTECMP 2017) on 21st March 2017 at Department of Physics, Saurashtra University, Rajkot - 360005, Gujarat, India.

40. **Title:** Transient photo response of Fe doped GeSe single crystal; **Authors:** Megha Patel*, G. K. Solanki, K. D. Patel, Pratik Pataniya, Mohit Tannarana, Abhishek Patel, Chetan Zankat and **Kunjal Patel**; **Presented at:** Student Conference on Optics and Photonics (SCOP-2018), 4th – 6th October, 2018, organized by OSA - PRL Student Chapter, AMOPH Division, Physical Research Laboratory, Navarangpura, Ahmedabad – 380009, Gujarat, India.

41. **Title:** TUNABLE AND ANISOTROPIC PHOTORESPONSE OF LAYERED $Re_{0.2}Sn_{0.8}Se_2$ TERNARY ALLOY; **Authors:** Payal Chauhan, G. K. Solanki, Alkesh Patel, **Kunjal Patel**, Pratik Pataniya, Som Narayan, K. D. Patel, P. K. Jha and V. M. Pathak; **Presented at:** Two days National conference on STEM (Science, Technology, Engineering and Mathematics) cSTEM'19 during September 27-28, 2019 Organized by Department of Applied Science and humanities, G. H. Patel College of Engineering & Technology (GCET) in collaboration with Department of Physics and Department of Mathematics, Sardar Patel University, Vallabh Vidyanagar, Gujarat.

42. **Title:** Structural and Electrical Transport Properties of SnS single crystals grown by Direct Vapour Transport Technique; **Authors:** Vibhutiba Jethwa, **Kunjal Patel**, V. M. Pathak, G. K. Solanki and K. D. Patel; **Presented at:** Two days National conference on STEM (Science, Technology, Engineering and Mathematics) cSTEM'19 during September 27-28, 2019 Organized by Department of Applied Science and humanities, G. H. Patel College of Engineering & Technology (GCET) in collaboration with Department of Physics and Department of Mathematics, Sardar Patel University, Vallabh Vidyanagar, Gujarat.

43. **Title:** Fabrication of In/Crystalline P-$Sn_{0.4}SeCu_{0.6}$ Schottky Diode and Investigation of diode parameters using I-V Characteristics at Low Temperature; **Authors:** Karan K. Bhoraniya*, Mayuri Navapariya, **Kunjal Patel**, K. D. Patel*, V. M. Pathak, G. K. Solanki; **Presented at:** 34th Gujarat Science Congress-2020 (GSC-2020) during 8-9 February 2020 organized by Ganpat University, Faculty of Science, Mehsana Urban Institute of Sciences, Kherva-384012, Mehsana, Gujarat Under the Aegis of Gujarat Science Academy.

44. **Title:** Wavelength depended anisotropic photo sensing activity of zirconium trisulfide crystal; **Authors:** Anand Patel*, **Kunjal Patel**, Chaitanya Limberkar, K. D. Patel**, G. K. Solanki, V. M. Pathak; **(BEST PAPER AWARD); Presented at:** 6th International Conference on Nanoscience and Nanotechnology (ICONN-2021) (Virtual Conference) February 01-03, 2021, organized by Department of Physics and Nanotechnology, SRM Institute of Science and Technology (SRMIST), Kattankulathur, Chennai - 603203 Tamil Nadu - India in association with Shizuoka University- Japan and NCTU-Taiwan, GNS-New Zealand, ACCMS, Indian Physics Association, ICS India, Tata Institute of Fundamental Research India, RMIT University Australia and Springer Nature is organizing this edition of ICONN.

45. **Title:** Structural and electrical transport properties of SnSxSe1-x (x=0.75) single crystals; **Authors:** Vibhutiba Jethwa, **Kunjal Patel**, Vivek M. Pathak, Kireetkumar D. Patel and Gunvant K. Solanki;

Presented at: 6th International Conference on Nanoscience and Nanotechnology (ICONN-2021) (Virtual Conference) February 01-03, 2021, organized by Department of Physics and Nanotechnology, SRM Institute of Science and Technology (SRMIST), Kattankulathur, Chennai - 603203 Tamil Nadu - India in association with Shizuoka University- Japan and NCTU-Taiwan, GNS-New Zealand, ACCMS, Indian Physics Association, ICS India, Tata Institute of Fundamental Research India, RMIT University Australia and Springer Nature is organizing this edition of ICONN.

46. **Title:** Growth Characterization and Application of Zirconium Triselenide Crystal; **Authors:** Anand Patel*, **Kunjal Patel**, Chaitanya Limberkar, K. D. Patel, G. K. Solanki and V. M. Pathak; **(BEST PAPER AWARD); Presented at:** International Virtual Conference on Energy Conversion and Storage (ICECS-2K21), April 20 & 21 Organized by Department of Physics, PPG College of Arts and Science, Coimbatore-641035, Tamil Nadu, India, In Collaboration with Indian Association for Crystal Growth (IACG).

47. **Title:** Anisotropic Pulse Photo Response of ZrS_3 Crystal at Cryogenic Temperatures; **Authors:** Anand Patel*, **Kunjal Patel**, Chaitanya Limberkar, Vibhutiba Jethwa, K. D. Patel, G. K. Solanki and V. M. Pathak; **Presented at:** 2nd International Symposium on Modeling of Crystal Growth Processes and Devices (MCGPD-2021) 5-8, July 2021, Organized by SSN Research Center, SSN College of Engineering, SSN Institutions, Kalavakkam, Chennai-603110, Tamilnadu, India, In association with Indian Association for Crystal Growth & Indian Science and Technology Association International Organization for Crystal Growth. (ORAL PRESENTATION)

48. **Title:** Electrical And Optical Properties of SnX (X = S, Se) Crystals Grown via DVT Technique; **Authors:** Vibhutiba Jethwa*, **Kunjal Patel**, Anand Patel, V. M. Pathak and G. K. Solanki; **Presented at:** 2nd International Symposium on Modeling of Crystal Growth Processes and Devices (MCGPD-2021) 5-8, July 2021, Organized by SSN Research Center, SSN College of Engineering, SSN Institutions, Kalavakkam, Chennai-603110, Tamilnadu, India, In association with Indian Association for Crystal Growth & Indian Science and Technology Association International Organization for Crystal Growth. (ORAL PRESENTATION)

49. **Title:** Electrical And Optical Properties of SnX (X = S, Se) Crystals Grown via DVT Technique; **Authors:** Vibhutiba Jethwa*, **Kunjal Patel**, Anand Patel, V. M. Pathak and G. K. Solanki; **(BEST ORAL PRESENTATION AWARD); Presented at:** International Conference on Solution Grown Crystals and Their Useful Applications (SGCA-2021) in association with Indian Association for Crystal Growth (IACG), 13-15 September 2021, Organized by SSN Research Centre, SSN Institutions (Autonomous) Chennai-603110, Tamil Nadu, India (ORAL PRESENTATION)

50. **Title:** Anisotropic White Light Sensing Activity of ZrS_3 Bulk Single Crystal; **Authors:** Anand Patel*, Chaitanya Limberkar, **Kunjal Patel**, Sanjay Bhakhar, K. D. Patel, G. K. Solanki, V. M. Pathak; **Presented at:** International Conference on Solution Grown Crystals and Their Useful Applications (SGCA-2021) in association with Indian Association for Crystal Growth (IACG), 13-15 September 2021, Organized by SSN Research Centre, SSN Institutions (Autonomous) Chennai-603110, Tamil Nadu, India (ORAL PRESENTATION)

51. **Title:** ENHANCED ELECTRICAL AND OPTOELECTRONIC PERFORMANCE OF SNS CRYSTAL BY SE DOPING; **Authors:** Vibhutiba Jethwa*, **Kunjal Patel**, V. M. Pathak and G. K. Solanki; **(BEST POSTER PRESENTATION AWARD (1st prize); Presented at:** National Conference

on "Emerging Trends in Functional Oxides and Nanomaterials" (ETiFON-2021) organized by Department of Physics, Saurashtra University, Rajkot, Gujarat, India during October 28-29, 2021. (ORAL PRESENTATION)

52. **Title:** Temperature-dependent vibrational properties of DVT grown orthorhombic SnS single crystals and their application as a self-powered photodetector; **Authors:** Vibhutiba P. Jethwa*, **Kunjal Patel**, Narayan Som, Vivek M. Pathak, Kireetkumar D. Patel*, Gunvant K. Solanki and Prafulla K. Jha; **Presented at:** 3rd International Symposium on Modeling of Crystal Growth Processes and Devices (MCGPD-2023) 6 – 8, March 2023 Organized by SSN Research Centre, Department of Physics, SSN College of Engineering, SSN Institutions, Kalavakkam, Chennai – 603110, Tamilnadu, India In association with Indian Association for Crystal Growth & Indian Science and Technology Association International Organization for Crystal Growth. (ORAL PRESENTATION)

53. **Title:** Temperature-dependent vibrational properties of DVT grown orthorhombic SnS single crystals and their application as a self-powered photodetector; **Authors:** Vibhutiba P. Jethwa*, **Kunjal Patel**, Narayan Som, Vivek M. Pathak, Kireetkumar D. Patel*, Gunvant K. Solanki and Prafulla K. Jha; **Presented at:** 7th International Conference on Nanoscience and Nanotechnology (ICONN-2023) organized by Department of Physics and Nanotechnology, SRM IST, India during March 27- 29, 2023, in association with Shizuoka University, Japan; National Yang Ming Chiao Tung University, Taiwan; GNS Science, New Zealand; University of Rome Tor Vergata, Italy; Asian Consortium on Computational Materials Science (ACCMS), Japan; Indian Ceramic Society; Indian Physics Association (IPA); Solar Energy Society of India (SESI); Innovation, Science & Technology Foundation - Tirupati (ISTF-T) and co-sponsored by Defence Research and Development Organization (DRDO), India; Council of Scientific & Industrial Research (CSIR), India; The Indian Science Congress Association (ISCA) and Springer Nature. (POSTER PRESENTATION)

PERSONAL DETAILS:

- **NAME** : Kunjal Sureshchandra Patel
- **FATHER'S NAME** : Sureshchandra Rambhai Patel
- **MOTHER'S NAME** : Nitaben Sureshchandra Patel
- **SEX** : Male.
- **NATIONALITY** : Indian.
- **LANGUAGES KNOWN** : English, Hindi and Gujarati.
- **HOBBIES** : Playing Sports, Playing Musical Instruments, Research Work, Photography.

Declaration:

I assure you that the above stated information is true to the best of my knowledge and I will present the documents if any required.

Yours Sincerely,
Dr. Kunjal Sureshchandra Patel.