### PROF. (DR.) ARIJIT SAHA

Flat 2C, Block B, Tarama Apartment, FA29, Narayantala West, Baguiati PO: Deshbandhu Nagar, Kolkata 700059, West Bengal, India

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### **Professional Summary**

Exceptionally seasoned and dedicated Engineering Professor with a strong record in both teaching and administration. Adept at explaining highly complex engineering theories and practices in a clear and accessible manner to a variety of professional and non-professional audiences. Committed to offering interested students my full attention and expertise to help further their academic and professional goals; has a touch base with other engineering professionals to update on latest principles that govern the field that will enhance the learning experience of students.

### **Skills**

- Extensive breadth of experience in engineering instruction at the college and University level
- Strong ability to deliver course material through a variety of teaching methods
- Excellent interpersonal, presentation and communication skills
- Superior creative and critical thinking abilities
- High multitasking ability to balance teaching and administrative duties
- Well organized
- Proficiency in Matlab and MS Office including PowerPoint, Word and Excel

## **Professional Affiliations**

- Fellow 'The Institution of Electronics and Telecommunication Engineers (IETE)' (Membership No. F-503301)
- Fellow 'Optical Society of India (OSI)' (Membership No. L.524)
- Life Member 'Indian Society for Technical Education (ISTE)' (Membership No. LM123320)
- Life Member 'International Association of Engineers (IAENG)' (Membership No. 299055)

# **Work Experience**

**Principal** 01/06/2023–Present

Dum Dum Motijheel Rabindra Mahavidyalaya, Kolkata, West Bengal

Professor 17/07/2021–31/05/2023

Department of Electronics & Communication Engineering

B. P. Poddar Institute of Management & Technology, Kolkata, West Bengal

**Associate Professor** 01/11/2011–16/07/2021

Department of Electronics & Communication Engineering

B. P. Poddar Institute of Management & Technology, Kolkata, West Bengal

Visiting Professor	March 2009-Present
University of Calcutta, Kolkata, West Bengal	
Assistant Professor Department of Electronics & Communication Engineering B. P. Poddar Institute of Management & Technology, Kolkar	01/03/2008–31/10/2011 ta, West Bengal
Assistant Professor  Department of Electronics & Communication Engineering  JIS College of Engineering, Kalyani, Nadia, West Bengal	01/10/2006-29/02/2008
Senior Lecturer Department of Electronics & Communication Engineering JIS College of Engineering, Kalyani, Nadia, West Bengal	01/10/2004-30/09/2006
Lecturer Department of Electronics & Communication Engineering JIS College of Engineering, Kalyani, Nadia, West Bengal	01/08/2001-30/09/2004
Associate Software Engineer Computer Associates-TCG Software Kolkata, West Bengal	01/01/2001-31/07/2001
System Analyst ABP Ltd Kolkata, West Bengal	23/06/1999–31/12/2000

### **Education**

- Doctoral Degree Ph.D. (Tech.) January 2013.
   Dept. of Applied Optics & Photonics, University of Calcutta, India
- Master's Degree M. Tech. (1<sup>st</sup> Class), 2004. Dept. of Applied Physics, University of Calcutta, India
- **Bachelor's Degree** B. Tech. (1<sup>st</sup> Class), 1999. Dept. of Applied Physics, University of Calcutta, India
- Bachelor's Degree—B. Sc. (Honours in Physics), (1st Class), 1996. Krishnath College, University of Calcutta, India

### Research

 Research Topic- Novel applications of chromatic behaviour of birefringent networks, March 2008-November 2012
 Dept. of Applied Optics & Photonics, University of Calcutta, India

## Award

- Obtained "Leading Educationist of India award 2018" from DK International Research Foundation, TamilNadu in Academic Year 2017-18.
- Obtained "Best Faculty award" from Cognizant in Academic Year 2014-15.
- Obtained Scholarship for the result of B.Sc. from the Govt. of India.
- Obtained National Scholarship for the result of Madhyamik.

## **Computer Proficiency**

- Scientific Language: MATLAB, C
- Operating Systems: MS-DOS 6.22, WINDOWS 9X, WINDOWS 2000, WINDOWS NT, WINDOWS XP, SUN SOLARIS, UNIX, LINUX
- RDBMS: Ingress II, Ingress 6.4, Open Ingress 1.2, ESQL.
- Application Package: MS Office

### **Conferences/ Seminar Attended**

- Attended the Conference of CSI at BPPIMT on 13/09/2012.
- Attended and presented a paper in the Conference "Challenges of basic research in innovating technologies" at Kolkata, India, on 04/05/2013.
- Presented a paper titled *A New Achromatic Combination of Birefringent Plates*, in International conference on Trends in Optics & Photonics at Kolkata, India, March 1-4, 2009.
- Presented a paper titled *A zero-order achromatic quarter-wave plate for visible spectrum*, in International conference on Trends in Optics & Photonics II, at Kolkata, India, December 7-9, 2011.
- Presented a paper titled *Design of optical finite impulse response filter generating arbitrary spectrum output*, in International Conference on optics and photonics (ICOP-2015), at Kolkata, India, February 20-22, 2015.
- Attended a seminar on "Research methodology and pedagogy" on 2<sup>nd</sup> July 2016 at BPPIMT.

# **Training Attended**

- Successfully completed AICTE-UKIERI Further Education Leadership and Management Training Programme during 23-26 November 2021
- Successfully completed Phase 2 of AICTE-UKIERI Further Education Leadership and Management Training Programme during 18-21 January 2022
- Successfully completed Phase 3 of AICTE-UKIERI Further Education Leadership and Management Training Programme during 21-23 March 2022

# **Workshops Attended**

- Participated and successfully completed the five-day workshop Mission10X conducted by WIPRO and held at BPPIMT during 12-17<sup>th</sup> April 2010.
- Participated and successfully completed the two-day advance workshop of Mission10X conducted by WIPRO and held at MCKVIE during 27-28<sup>th</sup> July 2010.
- Attended a demonstration workshop on LabView on 2<sup>nd</sup> June 2016 at BPPIMT.
- Participated in a one-day workshop on "Virtual Laboratory", jointly organized by BPPIMT and IIT Guwahati on 17<sup>th</sup> March 2017.
- Attended a workshop on "Application of photovoltaic cell", organized by SPIE student chapter and Dept. of ECE, BPPIMT on 26<sup>th</sup> April 2017.
- Attended a one day "Outcome Based Education and Accreditation Workshop" on 28<sup>th</sup> May 2017, jointly organized by National Board of Accreditation and MAKAUT.

- Attended a workshop on "Innovative experiments by open-source hardware and software" on 5<sup>th</sup> July 2016 organized by Dept. of Humanities and Basic science, BPPIMT.
- Attended a two-day workshop on "IOT and Embedded system design", under TI (India) University Program during 20-21<sup>st</sup> December 2018 organized by Dept. of Electronics & Communication Engineering, BPPIMT with Program partner *Digital Shark Technology*, *Bangalore*.
- Attended a two-day workshop titled "Outcome Based Education" during 24-25 April 2019, jointly organized by NITTTR and BPPIMT.
- Attended a two-day "National level workshop on NIRF India Rankings 2022 for higher education institutions", during 5-6 January 2022, organized by Institute for Academic Excellence in collaboration with Collegiate Education & Technical Education Department, Govt. of Telangana

# **Faculty Development Programs Attended**

- Successfully completed a two-week Advanced faculty training program on "Digital Signal Processing, Speech and Image Processing" held at CDAC, Kolkata from 24<sup>th</sup> June 2013 to 5<sup>th</sup> July 2013.
- Successfully completed a two-week *AICTE sponsored Faculty Development Programme* on "Recent Trends in Communication Systems" held at BPPIMT during 7<sup>th</sup> to 21<sup>st</sup> November 2013.
- Successfully completed a one-day *Faculty Development Program* on "Data Sciences" on 30<sup>th</sup> June 2016, organized by Cognizant.
- Successfully completed a one-week *Short Term Training Program* on "Numerical and statistical methods using software tools" held at NITTTR, Kolkata from 28<sup>th</sup> May 2018 to 1<sup>st</sup> June 2018.
- Successfully completed a one-week *Faculty Development Program* on "Recent Trends in Communication Systems and Devices" held at BPPIMT, Kolkata from 21<sup>st</sup> to 25<sup>th</sup> July, 2020.
- Successfully completed *AICTE Training And Learning (ATAL) Academy FDP* on "Recent Trends and Applications in Biomedical Signal and Image Processing" at G. H. Raisoni College of Engineering, Nagpur from 21<sup>st</sup> to 25<sup>th</sup> September, 2020
- Successfully completed AICTE Training And Learning (ATAL) Academy FDP on "Photonics" at Thakur College of Engineering & Technology, Mumbai from 23<sup>rd</sup> to 27<sup>th</sup> November, 2020

# Faculty & Staff Development Program Organized

- Organizing member of the staff development program held by the ECE dept. at BPPIMT during May-June 2010.
- Organizing member of the one-week Faculty development program on "IoT: Past, Present, and Future" held by the ECE dept. at BPPIMT during 2-7 September 2021.

### **Conferences Organized**

 Organized as Joint convener of the National Conference EAPE 2013 to be held during 30-31 August 2013 at BPPIMT.

- Program committee member of National conference on "Emerging Trends on Computing & Communication (ETCC 2104)".
- Organized National Conference IPC2017 at BPPIMT in the capacity of Joint Convener.
- Organized three-day workshop on "Data Science and computational intelligence" at BPPIMT during 6-8 April 2018.
- Organized three-day National conference on "Information, Photonics & Communication 2019 (IPC'19)" at BPPIMT during 1-3 February 2019.

# **Seminars/Colloquiums Organized**

- Organized one-day seminar on 29<sup>th</sup> October 2010, as a part of SPIE student chapter activity on "Optical Fiber and its present relevance in communication" where Prof. Vijaya Ramarao of IIT Bombay delivered talk.
- Organized one-day colloquium on 13<sup>th</sup> November 2010, where Dr. S Chattopadhyay from the Department of Electronic Science, CU, delivered talk on "Strained Si-SiGe system for low power high speed CMOS applications" and Dr. A Chakraborty from A K Choudhury School of Information Technology, CU, spoke on "FPGA based real-time embedded system design".

### **Invited Talks**

- Delivered a talk on "A new achromatic combination of birefringent plates" in Faculty Seminar program 'Prasaron' at B. P. Poddar Institute of Management & Technology on 17<sup>th</sup>April 2009.
- Delivered a talk titled "High Impact Teaching skills" to pass on the knowledge gained by me at Mission10X to all faculty members of B. P. Poddar Institute of Management & Technology on 3<sup>rd</sup> June 2010.
- Delivered a talk on Matlab in Staff Development Programme on "Matlab and Latex" at B. P. Poddar Institute of Management & Technology during 29<sup>th</sup> June to 5<sup>th</sup> July 2011.
- Delivered a talk on "A zero-order achromatic quarter-wave plate for visible spectrum" in Faculty Seminar program 'Prasaron' at B. P. Poddar Institute of Management & Technology on 11<sup>th</sup>January 2013.
- Delivered a talk on "Introduction to Communications Toolbox in MATLAB 7.6.0 (R2008)" in AICTE sponsored Faculty Development Programme at B. P. Poddar Institute of Management &Technology on 9<sup>th</sup> November 2013.
- Delivered a talk on "Fundamentals of Electronics Communication" in SPIE Student Chapter sponsored two-day seminar at B. P. Poddar Institute of Management & Technology during 31<sup>st</sup> October to 1<sup>st</sup> November 2014.
- Delivered a talk on "Design of optical finite impulse response filter generating arbitrary spectrum output" in Faculty Seminar program 'Prasaron' at B. P. Poddar Institute of Management &Technology on 20<sup>th</sup> March 2015.
- Delivered invited lectures on various communication and signal processing tools of MATLAB in Faculty Development Programme on "Advanced Communication & Signal Processing" at Narula Institute of Technology, Agarpara, during 8-9 January 2015.
- Delivered a talk on "Optical wireless communication An overview" in SPIE Student Chapter sponsored two-day seminar EAPE 15 at B. P. Poddar Institute of Management & Technology during 9<sup>th</sup> October to 10<sup>th</sup> October 2015.

- Delivered a talk in the AICTE sponsored STTP on Simulation with Matlab From Device to Circuit, Phase-I held at JIS College of Engineering, Kalyani, India on 13<sup>th</sup> August 2021.
- Delivered a talk in the AICTE sponsored STTP on Simulation with Matlab –
  From Device to Circuit, Phase-II held at JIS College of Engineering, Kalyani,
  India on 3<sup>rd</sup> September 2021.
- Delivered a talk in the AICTE sponsored STTP on Simulation with Matlab From Device to Circuit, Phase-III held at JIS College of Engineering, Kalyani, India on 24<sup>th</sup> September 2021.
- Delivered a talk on "A step towards polarization control of solar telescope and efficient storage of astronomical images" in the Faculty Development Program on Astronomy, Astrophysics and Related Challenges sponsored by AICTE Training and Learning (ATAL) Academy held at B. P. Poddar Institute of Management & Technology on 8<sup>th</sup> January 2022.
- Delivered a talk on "Patent filing procedure" in an Awareness Session on IPR: What, Why & How at BPPIMT, Kolkata on 13th December, 2022.

### **List of Publications**

### **Books:**

- 1. Digital Principles and Logic Design Techniques from Laxmi Publications, New Delhi in January 2007, ISBN: 978-81-318-0621-0 & Infinity Science Press, USA in May 2007, ISBN: 1934015032.
- 2. *Optoelectronics and Optical Communication* from University Science Press, New Delhi in July 2011, ISBN: 978-93-81159-06-4.
- 3. Novel applications of chromatic behaviour of birefringent networks from Lambert Academic Publishing, Germany in January 2013, ISBN: 978-3-659-33981-3.
- 4. *Information Theory, Coding and Cryptography* from Pearson Education in July 2013, ISBN: 9788131797495.

### **Book Chapters:**

- 1. **Arijit Saha**, "A technique for optical comb-like channel spectrum generation," in *Innovation in Technologies Challenges of Basic Research*, R. Goswami *et* al., Eds. India: Narosa Publishing House, 2013, pp. 74-79, ISBN 978-81-8487-441-9.
- 2. S. Sarkar, A. Das, **A. Saha**, "A Technique for Generation of Renewable Electrical Energy from Noise". in *Information, Photonics and Communication. Lecture Notes in Networks and Systems*, Vol. 79, J. Mandal et al., Eds. Singapore: Springer, 2019, pp. 101-106, ISBN 978-981-32-9452-3, https://doi.org/10.1007/978-981-32-9453-0\_11
- 3. A. Patra, S. Bandyopadhyay, D. Chakraborty, **A. Saha**, "A Novel Approach to Compression of Satellite Images Using Butterworth Filtering," in *Information, Photonics and Communication. Lecture Notes in Networks and Systems*, Vol. 79, J. Mandal et. al., Eds. Singapore: Springer, 2019, pp. 179-183, ISBN 978-981-32-9452-3, https://doi.org/10.1007/978-981-32-9453-0 18
- 4. **Arijit Saha**, "Advances in Terahertz Imaging," in *Emerging Trends in Terahertz Solid-State Physics and Devices*, A. Biswas et al., Eds. Singapore:

- Springer, 2020, pp. 143-168, ISBN 978-981-15-3234-4, https://doi.org/10.1007/978-981-15-3235-1\_10
- 5. Anirban Patra, **Arijit Saha**, Kallol Bhattacharya, "Compression and multiplexing of medical images using optical image processing," in *Computational Intelligence and Its Applications in Healthcare*, P. Johri et al., Eds. United Kingdom: Elsevier Inc., 2020, pp. 63-71, ISBN 978-0-12-820604-1, https://doi.org/10.1016/B978-0-12-820604-1.00005-4
- Anirban Patra, Arijit Saha, Debasish Chakraborty, Kallol Bhattacharya, "Compression of High-Resolution Satellite Images Using Optical Image Processing," in *Satellite Systems - Design, Modeling, Simulation and Analysis*, Tien M. Nguyen, Ed. United Kingdom: IntechOpen, 2021, pp.1-5, ISBN 978-1-83968-374-9, ISBN:978-1-83968-373-2, http://dx.doi.org/10.5772/intech open.94147.
- 7. A. Patra, **A. Saha**, K. Bhattacharya, "Encryption of Optically Compressed Medical Images Using Phase Matrix," in *Advanced Techniques for IoT Applications. EAIT 2021. Lecture Notes in Networks and Systems*, Vol. 292., J.K. Mandal et al. (Eds.), Singapore: Springer, 2022, pp. 14-21, ISBN: 978-981-16-4435-1, https://doi.org/10.1007/978-981-16-4435-1\_2
- 8. N. Mukhopadhyay, A. Saha, K. Bhattacharya, "Application of Flower Pollination Algorithm in Designing of a Multi-crystal Superachromatic Quarter-Wave Phase Retarder," in *Advanced Techniques for IoT Applications. EAIT 2021. Lecture Notes in Networks and Systems*, Vol. 292., J.K. Mandal et al. (Eds.), Singapore: Springer, 2022, pp. 399-407, ISBN: 978-981-16-4435-1, https://doi.org/10.1007/978-981-16-4435-1\_38
- 9. Nilanjan Mukhopadhyay, **Arijit Saha**, "Design of Super-Achromatic Phase Controlling Assemblies for THz Spectro-Polarimetric Imaging System Using Metaheuristic Optimization Technique," in *Optical to Terahertz Engineering*, A. Saha et al., Eds. Singapore: Springer, 2023, pp. 17-28, ISBN 978-981-99-0227-9, https://doi.org/10.1007/978-981-99-0228-6
- 10. Pia Sarkar, **Arijit Saha**, "Evolution of 6G and Terahertz Communication," in *Optical to Terahertz Engineering*, A. Saha et al., Eds. Singapore: Springer, 2023, pp. 45-58, ISBN 978-981-99-0227-9, https://doi.org/10.1007/978-981-99-0228-6

## **SCI/Scopus Indexed Journals:**

- 1. **Arijit Saha**, Kallol Bhattacharya, Ajoy Kumar Chakraborty: *A composite birefringent filter: design and simulation*, Journal of Modern Optics **56** (8), pp. 963-967 (May 2009), https://doi.org/10.1080/09500340902829585, ISSN: 0950-0340 (Print), 1362-3044 (Online), Impact Factor: 1.464.
- 2. **Arijit Saha,** Kallol Bhattacharya, Ajoy Kumar Chakraborty: *Three-element variable retarder for monochromatic light*, Optical Engineering **49** (7), 073004(1-4) (July 2010), https://doi.org/10.1117/1.3462065, ISSN: 0091-3286 (Print), 1560-2303 (Online), Impact Factor: 1.084.
- 3. **Arijit Saha**, Kallol Bhattacharya, Ajoy Kumar Chakraborty: *Reconfigurable achromatic half-wave and quarter-wave retarder in near infrared using crystalline quartz plates*, Optical Engineering **50** (3), 034004(1-4) (March 2011), https://doi.org/10.1117/1.3552666, ISSN: 0091-3286 (Print), 1560-2303 (Online), Impact Factor: 1.084.
- 4. **Arijit Saha**, Kallol Bhattacharya, Ajoy Kumar Chakraborty: *A near infrared zero-order achromatic retarder*, Pramana Journal of Physics (Springer), **77** (4),

- pp. 627-631 (October 2011), https://doi.org/10.1007/s12043-011-0099-y, ISSN: 0304-4289 (P), 0973-7111 (Online), Impact Factor: 2.219.
- 5. **Arijit Saha**, Kallol Bhattacharya, Ajoy Kumar Chakraborty: *New achromatic quarter-wave combination of birefringent plates*, Optical Engineering **51** (01), 013001(1-5) (January 2012), https://doi.org/10.1117/1.OE.51.1.013001, ISSN: 0091-3286 (Print), 1560-2303 (Online), Impact Factor: 1.084.
- 6. **Arijit Saha**, Kallol Bhattacharya, Ajoy Kumar Chakraborty: *Achromatic quarter-wave plate using crystalline quartz*, Applied Optics **51** (12), pp. 1976-1980 (April 2012), https://doi.org/10.1364/AO.51.001976, ISSN: 1559-128X (Print), 2155-3165 (Online), Impact Factor: 1.98.
- 7. **Arijit Saha**, Kallol Bhattacharya, Ajoy Kumar Chakraborty: *Compensation of rotation effect in a combination of retarders*, Applied Optics **51** (20), pp. 4798-4802 (July 2012), https://doi.org/10.1364/AO.51.004798, ISSN: 1559-128X (Print), 2155-3165 (Online), Impact Factor: 1.98.
- 8. **Arijit Saha**, Sonali Chakraborty, Kallol Bhattacharya: *Achromatic half-wave combination of birefringent plates*, Optik **125** (16), pp. 4534-4537 (August 2014), https://doi.org/10.1016/j.ijleo.2014.02.012, ISSN: 0030-4026, Impact Factor: 2.443.
- 9. Sonali Chakraborty, **Arijit Saha**, Kallol Bhattacharya: *Extraction of difference of two images using periodic carrier modulation*, Optik **125** (21), pp. 6466-6469 (November 2014), https://doi.org/10.1016/j.ijleo.2014.06.161, ISSN: 0030-4026, Impact Factor: 2.443.
- Arijit Saha, Kallol Bhattacharya, Ajoy Kumar Chakraborty: Depolarization of polarized polychromatic beam during propagation in a birefringent medium, Optik 127 (15), pp. 5882-5886 (August 2016), https://doi.org/10.1016/j.ijleo.2016.04.001, ISSN: 0030-4026, Impact Factor: 2.443.
- 11. **Arijit Saha**: *Birefringent network forming a rotator*, Optik **127** (15), pp. 5914-5919 (August 2016), https://doi.org/10.1016/j.ijleo.2016.04.009, ISSN: 0030-4026, Impact Factor: 2.443.
- 12. Nilanjan Mukhopadhyay, Sudip Mandal, Kallol Bhattacharya, **Arijit Saha**: Design of a superachromatic quarter-wave retarder for near-infrared region using flower pollination algorithm, Optical Engineering **58**(9), 095101(1-6) (September 2019), https://doi.org/10.1117/1.OE.58.9.095101, ISSN: 0091-3286 (Print), 1560-2303 (Online), Impact Factor: 1.084.
- 13. Anirban Patra, **Arijit Saha**, Kallol Bhattacharya: *Multiplexing and encryption of images using phase grating and random phase mask*, Optical Engineering **59**(3), 033105(1-10) (March 2020), https://doi.org/10.1117/1.OE.59.3.033105, ISSN: 0091-3286 (Print), 1560-2303 (Online), Impact Factor: 1.084.
- 14. Nilanjan Mukhopadhyay, **Arijit Saha**, Kallol Bhattacharya: *Super-Achromatic Quarter-Wave Phase Retarder for Visible, Near Infrared, and Short Wave Infrared Region Applications*, Optics and Spectroscopy **128**(8), pp. 1199-1204 (August 2020), https://doi.org/10.1134/S0030400X20080251, ISSN: 0030-400X, Impact Factor: 0.891.
- 15. N. Mukhopadhyay, **A. Saha**, K. Bhattacharya: *Study on superachromatism of a quarter-wave retarder for the visible range of the spectrum*, Journal of Optical Technology **87**(11), pp. 638-641 (November 2020), https://doi.org/10.1364/JOT.87.000638, ISSN: 1070-9762 (print), Impact Factor: 0.422.
- 16. Anirban Patra, **Arijit Saha**, Kallol Bhattacharya: *High-resolution image multiplexing using amplitude grating for remote sensing applications*, Optical

- Engineering **60**(7), pp. 073104(1-11) (July 2021), https://doi.org/10.1117/1.OE.60.7.073104, ISSN: 0091-3286 (Print), 1560-2303 (Online), Impact Factor: 1.084.
- 17. N. Mukhopadhyay, **A. Saha**, K. Bhattacharya: *Design of a narrow band-pass birefringent filter for visible range*, Pramana Journal of Physics (Springer), **95** (3), pp. 142(1-9) (August 2021), https://doi.org/10.1007/s12043-021-02175-0, ISSN: 0304-4289 (P), 0973-7111 (Online), Impact Factor: 2.219.
- 18. Debarati Dey Roy, **Arijit Saha**, Debashis De: *Investigation of anomalous photon management in organic nano particles-coating photovoltaic solar cells*, Silicon, **14**(16), pp. 10939-10946, (November 2022) (Published online: 28 March 2022), https://doi.org/10.1007/s12633-022-01827-z, ISSN: 1876-990X (Print), 1876-9918 (Online), Impact Factor: 2.67.
- 19. Anirban Patra, **Arijit Saha**, Kallol Bhattacharya: *Efficient Storage and Encryption of 32-Slice CT Scan Images Using Phase Grating*, Arabian Journal for Science and Engineering, **48**(2), pp. 1757-1770, (February 2023) (Published online: 24 June 2022), https://doi.org/ 10.1007/s13369-022-06986-0, ISSN: 2193-567X (Print), 2191-4281 (Online), Impact Factor: 2.334.
- 20. Pia Sarkar, **Arijit Saha**, Aditya Banerjee, Amit Banerjee, A. Y. Seteikind, I. G. Samusev: *Review on the Evolution of 6G and Terahertz Communication for Highspeed Information Processing*, Bulletin of the Russian Academy of Sciences: Physics, **86** (Suppl 1), pp. S166–S170 (December 2022), https://doi.org/10.3103/S1062873822700617, ISSN: 1062-8738, Impact Factor: 0.476.

### **Other Peer-Reviewed Journals:**

- 1. **Arijit Saha**, Kallol Bhattacharya, Ajoy Kumar Chakraborty: *Combination of birefringent plates forming a retarder having marginal chromatic error*, Science & Culture **75** (11-12), pp. 424-427 (November-December 2009), ISSN: 0036-8156.
- 2. Anirban Patra, **Arijit Saha**, Ajoy Kumar Chakraborty: *A Simple Approach to Watermarking of Multiple Grayscale Images using Alpha Blending*, International Research Journal of Engineering and Technology (IRJET) **4** (3), pp. 302-304 (March 2017), ISSN:2395-0072 (P), 2395-0056 (E), Impact Factor: 5.181.
- 3. Kumari Sneha, Niharika Roy, Anirban Patra, **Arijit Saha**: *Watermarking in Medical Images Using Alpha Blending*, International Journal for Science and Advance Research in Technology (IJSART) **3**(10), pp. 384-387 (October 2017), ISSN: 2395-1052, Impact Factor: 4.284.
- 4. Amit Saha, Patrali Bhattacharya, Anirban Patra, **Arijit Saha**: *A novel approach to detect quality of apple using image processing*, International Journal for Science and Advance Research in Technology (IJSART)**4**(1), pp. 513-515 (January 2018), ISSN: 2395-1052, Impact Factor: 4.284.
- 5. Anirban Patra, Debasish Chakraborty, **Arijit Saha**, Kallol Bhattacharya: *Encryption of Optically Compressed Satellite Image using Random phase*, International Journal of Innovative Knowledge Concepts, **7** (Special Issue 1), pp. 192-194 (February 2019), ISSN: 2454-2415

- 6. Nilanjan Mukhopadhyay, **Arijit Saha**, Kallol Bhattacharya: *Design of a broadband achromatic quarter-wave phase retarder for near infrared spectrum using Flower Pollination Algorithm*, International Journal of Innovative Knowledge Concepts, 7 (Special Issue 1), pp. 239-242 (February 2019), ISSN: 2454-2415
- 7. **Arijit Saha**, Kritarth Kumar, Ria Jesmin, Satya, Vaibhav Gupta: *Intelligent Greenhouse Monitoring System (IGMS) Integrated with GSM Technology*, Asian Journal of Electrical Sciences, 8 (1), pp. 40-43, (January-March 2019), ISSN: 2249-6297.
- 8. Anirban Patra, **Arijit Saha**, Kallol Bhattacharya: *Compression of Images using Amplitude Grating*, International Journal of Innovations in Engineering and Technology (IJIET), **13** (2), pp. 043-046 (May 2019), ISSN: 2319-1058.
- 9. Anirban Patra, Debasish Chakraborty, **Arijit Saha**, Kallol Bhattacharya: *Compression of Satellite Images using Sinusoidal Amplitude Grating*, International Journal of Electronics Engineering, **11** (1), pp. 664-667, (Jan 2019-June 2019), ISSN: 0973-7383.
- 10. Anirban Patra, Anupam Sengupta, Debasish Chakraborty, Paramita Chakraborty, **Arijit Saha**: Compression of High-Resolution Remote Sensing Images to Enhance Storage Capacity using Optical Processing in Python, International Journal of Research and Analytical Reviews, 9 (1), pp. 690-695, (March 2022), ISSN: 2348-1269

## **International Symposium Proceedings:**

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