

## Curriculum Vitae [Last updated: 01 September 2023]

### PERSONAL DETAILS

#### DR ANINDYA BOSE

Communication Address

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### ACADEMIC QUALIFICATIONS

- Completed **Module I** of “**M Sc in Space Science (MSS)**” course at **International Space University, Strasbourg, FRANCE** in 2005 (01 September 2005 – 31 October 2005),
- Ph. D. Science (Physics)**: From The University of Burdwan, Burdwan 713 104, INDIA in December, 2003. Title of the thesis is “Studies on the Accuracy of Timing via Satellites and Positioning via GPS” [<http://hdl.handle.net/10603/66065>] under the joint supervision of Dr P Banerjee, Head, Time and Frequency Section, National Physical Laboratory, New Delhi, India and Professor B N Biswas, Dept of Physics, Burdwan University, Burdwan
- M Phil in Microwaves** in 1993 from the University of Burdwan, Burdwan, INDIA (1<sup>st</sup> Class)
- M Sc in Physics** in 1992 from the University of Burdwan, Burdwan, INDIA (1<sup>st</sup> Class)
- B Sc in Physics** in 1990 from the University of Burdwan, Burdwan, INDIA (2<sup>nd</sup> Class)

### EMPLOYMENT DETAILS

Sl No	Designation	Address of Employer	Duration		Job Responsibilities (Latest Pay Scale)
1	Research Fellow	Time and Frequency Section, National Physical Laboratory (NPL), New Delhi 110 012 INDIA	29.09.94 to 14.10.96	2 years	R&D activities on satellite-based navigation system (GPS) under Sponsored Projects.
2	Scientific Officer	The University of Burdwan, Burdwan 713 104 INDIA	16.10.96 to 15.10.01	5 years	<ul style="list-style-type: none"><li><b>Teaching in</b> “M Tech in Electronics and Communication Engg (Microwaves)” course [<a href="#">AICTE Faculty ID 1-470579889</a>]</li><li><b>Academic Management and Administrative duties</b></li><li><b>Research activities</b> undergoing in the department</li><li><b>Sponsored Research Project Management</b> – research &amp; administration including project management &amp; financial accounting, progress review.</li></ul>

3	Scientific Officer (Sr Scale)	Do	16.10.01 To 15.10.05	4 years	<b>DO</b>
4	Scientific Officer (Selection Grade)	Do	16.10.05 to 15.10.13	8 years	<b>DO</b>
5	<b>Senior Scientific Officer</b>	DO	16.10.13 to Till date	10 years	<b>DO</b>
<b>Total experience</b>				<b>27 years teaching, 29 years R&amp;D</b>	

### TEACHING EXPERIENCE

**Post Graduate teaching in M Tech in Electronics and Communication Engineering (Microwaves) course in the Department of Physics, The University of Burdwan for 27 years.** The job assignments require both theoretical and practical training of the students, also supervision of seminars presented by the students and project works. The course modules assigned are Microwave High Power Tubes and Microwave solid-state devices, Radar, Antennas, Electronic Navigation Techniques, Mobile and Satellite Communications etc. [[AICTE Faculty ID 1-470579889](#)]

**Post Graduate Teaching in M Sc in Geospatial Science Course** in the Department of Geospatial Science, The University of Burdwan for six years. Course modules offered: Basics of electromagnetic signals, sensors, platforms, interaction processes of em signals, Microwaves, IR Remote sensing, use of satellite technologies in Remote sensing, GNSS, RADAR, LIDAR, SONAR.

**Post Graduate Teaching in M Sc in Electronics and Communications** in the Department of Electronics and Communications, The University of Burdwan for three years. Course modules offered: Basic of Semiconductors, Microprocessor and Microcontrollers, RADAR and Electronic Navigation Systems.

Experience in **academic management** activities like course management, assignment of project work to students in consultation with other academic and R&D organizations, day-to-day management of the course etc as required as assigned by the Department.

Shared responsibility for classes at UGC Academic Staff College/ UGC-HRDC, BU, UIT, BU, Centre for Interdisciplinary Studies, BU etc.

**Served as a resource person for 90 lectures in** orientation programs/ Refresher courses organized by UGC-Academic Staff College, The University of Burdwan, in 02 courses as Joint Coordinator and for more than **15** other courses/ programs outside the University.

### RESEARCH EXPERIENCE

(A) Have research experience of **29 years**. This includes working experience under different sponsored projects for running and management. The areas of research interest include:

- **Satellite-based navigation systems (GNSS) for positioning, time transfer and Atmospheric Measurement applications.**

Established a state-of-the-art GNSS laboratory in The Department of Physics, The University of Burdwan with support from Govt of India Agencies (DRDO, ISRO, AICTE) and industries (Geostar Navigation, Russia, Celesphere Technologies, Bangalore)

Signed two (02) MoUs with GNSS Industry (Stesalit, Kolkata; Celesphere Technologies, Bangalore)

The University of Burdwan became **the first member from India to Multi-GNSS Asia (MGA) consortium** maintained by **Japan Space Exploration Agency (JAXA)** [2012] [<http://www.multignss.asia>]

Department of Physics, The University of Burdwan **received appreciation from European Space Agency (ESA)** for activities on the Galileo navigation system being among the first 50 global users of the system [2013]



Department of Physics, The University of Burdwan became **an active field trial Centre for Indian Regional Navigation Satellite System (IRNSS)** from Space Application Center (SAC), Indian Space Research Organization (ISRO), Ahmedabad, INDIA. SAC provided 03 IRNSS-GPS-SBAS receivers for the laboratory [2016]

Received **appreciation from GNSS Labs**, UK for supporting the STRIKE3 Project, a European Commission funded project under Horizon 2020 [2016]

**For details on GNSS research please visit: <https://bugnss.in>**



- **Microwave communication systems:** Have strong background and knowledge of the design, fabrication and measurement of Microwave communication systems. Have experience of use of very high-frequency instruments and computer-controlled measurement techniques.
- **Microwave patch antenna:** Design, development, measurement and use.

<b>Vidywan Profile:</b> <a href="https://vidwan.inflibnet.ac.in/profile/187968">https://vidwan.inflibnet.ac.in/profile/187968</a>	<b>ORCID Profile:</b> <a href="https://orcid.org/0000-0003-4674-557X">https://orcid.org/0000-0003-4674-557X</a>
	
<b>Research Gate Profile:</b> <a href="https://www.researchgate.net/profile/Anindya-Bose-4">https://www.researchgate.net/profile/Anindya-Bose-4</a>	

**(B) Supervision of Post-Doctoral Fellows/ Research students/ Internships:**

**Post-Doctoral Fellow (PDF)**

Sl No	Name of the Fellow	Work	Duration	Sponsor
01	Dr Adewumi Adebayo Segun Associate Professor LAUTECH, Nigeria	<ul style="list-style-type: none"> <li>• Use of compact, low-cost, single and dual frequency GNSS modules for positioning.</li> <li>• Effects of the ionosphere, troposphere and multipath on GNSS positioning</li> </ul>	February 2023 to July 2023	Tertiary Education Trust Fund (TETFUND), Nigeria <b>Sanctioned fund: US\$ 6700</b>

**Ph D:** 02 students completed Ph D (2016, 2023); 02 continuing.

Sl No	Name of the Student	Title of Thesis	Date of Award	University
01	Dr (Ms) Shreya Sarkar	Studies on evolution of satellite-based navigation system towards a complete GNSS	23/12/2016	The University of Burdwan
02	Ms Debipriya Dutta	Topic: Studies on available satellite navigation signals for a robust Multi-GNSS from India <b>Submitted</b>		
03	Mr Mrinal Kanti Goswami, Sc F and Head, S-band Radar, DRDO-ITR, Chandipur, India	Topic: Studies on Global Navigation Satellite Systems (GNSS) from India in Post GLONASS Era <b>Continuing</b> (Jointly with Prof R Ghatak, Deptt of E&CE, NIT Durgapur, India at National Institute of Technology, Durgapur)		
04	Mr Sukabya Dan	Topic: Studies on Enhanced and Resilient Service Quality of Indian Regional Navigation Satellite System (IRNSS/ NavIC) <b>Continuing</b> (Jointly with Dr Chaitali Koley, Deptt of E&CE, NIT Mizoram, India at National Institute of Technology, Mizoram)		

**SRF:** 02 students worked under DRDO sponsored project (June 2017- October 2020),  
01 student worked under CARS project sponsored by Integrated Test Range (ITR), DRDO,  
Chandipur (January 2021 - continuing)

**JRF:** 02 students worked under SAC/ ISRO sponsored project (Feb 2017 – March 2020)  
01 Student working under DST-SERB sponsored project (2021-2024)

**Project Associate I:** 01 student working under NGP-DST Sponsored project (2023-25)

**M Tech:** 23 internal and 01 external students completed final year M Tech project

**M Sc:** 01 external and 09 internal students completed M Sc projects

**BE/ B Tech Projects:** 06 students (external)

**Short-term project/ Summer/ Winter Internships:** 01 (2018), 01 (2019), 08 (2020); 03 (2022); 01 (2023)

**INSPIRE Internship (Undergraduate): (8 weeks):** 01 (2023)

**(C)** For the purpose of R&D activities, handled different types of sophisticated instruments like:

Satellite receivers (Ashtech, 3S Navigation, Trimble, Allen Osborne, Datum, ASPL, Analog Devices, Icom, GoeS-1M/ 3M, JAVAD DELTA G3T, Leica GR50, Racelogic Wideband III, uBLOX etc.), Ceasium Frequency Standards (HP), Vector network analyzer (HP), Spectrum Analyzers (HP and Tektronics), Time Interval Counters (HP), Microwave sources, components and detectors, Optical communication components and measuring systems in Computer controlled environments etc.

**(D) Publications:**

- [Published in journals](#) (click for details) : **46**
- Presented in national and international symposiums : **123**
- Technical reports : **04**
- Book Chapters/ Contribution in edited volumes etc. : **10**
- Edited Volumes : **02**

**(E) Copyright of Software:**

- “NavRx: GNSS data recording software”, Anindya Bose, Sumit Dey and Partha Rakshit, Indian Copyright Registration No. SW-13744/2020 dt 01/10/2020, Diary No 9023/2020-CO/SW dt 3 July 2020

**(F) IT skill :**

Have experience of using computers for scientific R&D activities, technical requirements and Office automation systems. Acquainted in requirement-based program development and experienced in using computer based extensive satellite data monitoring, recording systems, analysis and presentations.

**(G) Reviewer** [Publon Profile: <https://publons.com/author/1341363/dr-anindya-bose#stats>]

IET Radar, Sonar and Navigation	IET Science, Measurement and Technology
IET Electronics Letters	IET Signal Processing
Journal of Navigation	Radio Science
IEEE Access	IEEE Transactions on Aerospace and Electronic Systems.
IEEE Sensors Letters	GPS Solutions
Forests	Forest Science and Technology
Tata MacGraw-Hill Education Pvt Ltd	China Communications
Mathematical Problems in Engineering	Measurement
Science Progress	Chinese Journal of Electronics
Springer Nature Applied Sciences	PLOS ONE
SAE Technical Papers	Journal of Intelligent and Fuzzy Systems
Journal of Location Based Services	The Egyptian Journal of Remote Sensing and Space Sciences
Indian J Radio and Space Physics	Indian J Pure and Applied Physics
Defence Science Journal	IETE Technical Review

**(H) Sponsored projects/ Experience under Sponsored Projects:**

Worked with the following projects sponsored by different agencies of Government of India in the capacities of Research Fellow, Guest Worker, Scientific Officer and Co-Investigator. Most of these projects were associated with R&D activities on GNSS.

<b>H1: Research and Development Projects</b>			
<b>Sl No</b>	<b>Name of the Project and Sponsoring Agency</b>	<b>Duration</b>	<b>Responsibility</b>
PJR 1	Study on the Global Positioning Satellite System (GPS) and its utilisation in precise positioning	(June '94 – Sept. '94) 03 months	Student (M Phil in Microwaves dissertation)
PJR 2	Study on the Reliability and Availability of GPS Signals in India (SRAGI) Sponsored by <b>DoE, GoI</b>	(Sept. '94 – Feb. '96) 1 Yr 06 months	Research Fellow
PJR 3	A study on the deteriorating Effects of Selective Availability on Precise Positioning and Timing in Normal GPS and DGPS modes Sponsored by: <b>DRDO, Min of Defence, GoI</b>	(Sept. '94 – Oct. '96) 02 yrs	Research Fellow
PJR 4	Studies on the Potentiality of GLONASS for Positioning and Timing vis-à-vis Application of GPS Sponsored by: <b>MIT and DRDO, Govt of India.</b>	(Oct '99 – Mar '01) 1 and 1/2 year	Guest Worker
PJR 5	Optical Signal Distribution in Phase Array Antenna, Power Combining and Beam Steering Sponsored by: <b>DTSR, Min of Defence, GoI</b>	(Sept '99 – Sept '02) 3 years	Co Investigator
PJR 6	Studies on chaotic oscillations in solid state microwave oscillators (SSMWO) and its application in chaos based communication systems Sponsored by: <b>CSIR, GoI</b>	(Sept. 05 – Sept., 08) 3 years	Co Investigator
PJR 7	MODROBS, Sponsored by: <b>AICTE, GoI</b>	2008 – 2010 2 years	-
PJR 8	Studies on Generation and Synchronization of Chaotic angle modulation signals in Microwave and mm-wave Gunn oscillators Sponsored by: <b>DST, GoI</b>	2010-2013	Co Investigator
PJR 9	Studies on GLONASS visibility, footprints, reliability and accuracy in and around India Sponsored by: <b>RCI, Hyderabad (DRDO), GoI</b> <b>Sanctioned Grant: INR 9.90 Lakhs</b>	2011-2012 01 year	<b>Research Service Provider</b>
PJR 10	Studies on PVT capabilities and advantages of NavIC by utilization of existing NavIC and GNSS infrastructure Sponsored by: <b>Space Application Center (SAC), ISRO, Ahmedabad, GoI</b> [Ref No: NGP-28] <b>Sanctioned Grant: INR 28.80 Lakhs</b>	2017-2020 (03 Years)	<b>Principal Investigator</b>
PJR 11	Studies on Multi-GNSS signal environment from India towards integrated and robust navigation solution and application development Sponsored by: <b>Defense Research and Development Organization (DRDO), New Delhi</b> [Ref No: ERIP/ ER/ DG-MSS/ 990516601/ M/ 01/ 1658] <b>Sanctioned Grant: INR 64.60 Lakhs</b>	2017-2020 (3 years 4 months)	<b>Principal Investigator</b>
<b>PJR 12</b>	Development of Cost Effective, Compact GNSS receiver for sub meter Accuracy using Low-cost hardware and Open Source GNSS package for location based Application Development Sponsored by: <b>All India Council of Technical Education (AICTE),</b>	2017-2020	<b>Principal Investigator</b>

	<b>New Delhi</b> [File No 8-10/ RIFD/ RPS/ Policy-1/ 2016-17] <b>Sanctioned Grant: INR 22.65 Lakhs</b>		
<b>PJR 13</b>	Applicability of Compact GNSS Modules in Real Time improvement of Position Accuracy for Test Range Applications Sponsored by: <b>Integrated Test Range (ITR), Defense Research and Development Organization (DRDO), Chandipur</b> [CARS Project Ref No. RD/PI-20/ITR-050 dt 22/06/2020] <b>Sanctioned Grant: INR 9.964 Lakhs</b>	2020-2022	<b>Principal Investigator</b>
<b>PJR 14</b>	Smart and precision agriculture for potato cultivation in West Bengal: An Information and Communication Technology (ICT) based effort Sponsored by: <b>DST, SERB, Govt of India</b> [Project Ref No. CRG/2020/005098] <b>Sanctioned Grant: INR 26.58 lakhs</b>	<b>2021-2024 (Ongoing)</b>	<b>Principal Investigator</b>
<b>PJR 15</b>	Development of Low-Cost GNSS RTK Base for Precise Geolocation and Handheld Precise Geolocation enabled Multi-Sensor Rover System HGS Sponsored by: <b>National Geospatial Program (NGP), DST, Govt of India</b> [Project Ref No. NGP/Anindya/Uni.Burdwan/WB/07/2022] <b>Sanctioned Grant: Rs 22.16 lakhs</b>	<b>2023-2025 (Ongoing)</b>	<b>Principal Investigator</b>
<b>PJR 16</b>	A study on the applicability of IRNSS/ NavIC time for Test Range applications through IRIG-B signal generation Sponsored by: <b>Integrated Test Range (ITR), Defense Research and Development Organization (DRDO), Chandipur</b> [CARS Project Ref No. PMD/CARS/059/2023 dt 25 July 2023] <b>Sanctioned Grant: INR 9.976 Lakhs</b>	<b>2023-2025 (Ongoing)</b>	<b>Principal Investigator</b>

## H2. Manpower Training Projects

<b>PJT 1</b>	Computer Training Program on Free Software Systems for School Teachers (Jointly Organised by Govt of West Bengal, West Bengal Board of Secondary Education and Burdwan University) Sponsored by: <b>Govt of West Bengal</b>	(August '10 – December '10) 05 months	<b>Coordinator</b>
<b>PJT 2</b>	5-day Faculty Development Program (FDP) under AICTE Training and Learning (ATAL) Academy on <b>Sensors Technology</b> <b>Sponsored by AICTE, A program under Accelerate Vigyan (AV) of SERB, DST</b> <b>Sanctioned Grant: 0.93 Lakhs</b> <b>Program Videos on YouTube: <a href="#">5-day FDP on Sensors Technology (Click on the Link)</a></b>	3-7 November, 2020	<b>Coordinator</b>
<b>PJT 3</b>	5-day Faculty Development Program (FDP) under AICTE Training and Learning (ATAL) Academy on <b>GNSS</b> <b>Sponsored by AICTE, Sanctioned Grant: 0.93 Lakhs</b> <b>Program Videos on YouTube: <a href="#">5-day FDP on GNSS/ NavIC (Click on the Link)</a></b>	21-25 September, 2021	<b>Coordinator</b>
<b>PJT 4</b>	2-week Advanced FDP under AICTE Training and Learning (ATAL) Academy on <b>GNSS/ NavIC</b> in cost-efficient Solution Development <b>Sponsored by AICTE, Sanctioned Grant: 3.0 Lakhs</b> <b>Online program Videos on YouTube: <a href="#">2-week Advanced FDP on Applications of GNSS/ NavIC in cost-efficient Solution Development (Click on the Link)</a></b>	9-20 January, 2023	<b>Coordinator</b>



<b>PJT 5</b>	2-week Capacity Building Program on “Space based Technologies for Disaster Management with special reference to Flood” Sponsored by IIRS-ISRO, <b>Sanctioned grant: Rs 9.124 Lakhs</b>	1-14 August, 2023	<b>Co-Coordinator</b>
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### AWARDS AND MEMBERSHIP

- **National Scholarship Award** (INDIA) in 1985
- **URSI Young Scientist Award** in the XXVIth General Assembly of International Union of Radio Science (URSI), Toronto, Canada, 13-21 August, 1999.
- **Senior Member**, International Union of Radio Science (**URSI**), Belgium
- **Life Fellow**, Institute of Electronics and Telecommunication Engineers (**IETE**), India
- **Life Member**, Indian Society of Remote Sensing (**ISRS**)
- **Life Member**, Astronomical Society of India (**ASI**), India
- **Life Member**, Indian Radio Science Society (**InRaSS**), India
- **Member**, Location and Timing Knowledge Transfer Network (**L&T KTN**), UK
- **Member**, International GNSS Society (**IGNSS**), Australia

### OTHER GNSS RELATED ACTIVITIES

- Invited Speaker in GNSS related Seminar/ Workshops: **16** [[List Attached](#)]
- Webinars on GNSS: **16**
- Served as **Joint Co-ordinator** for “*One day workshop on GNSS*” organized under URSI-APRASC Conference, New Delhi, India, 09 March, 2019
- Served as a **Mentor and Jury Member** in *Galileo Hackathon*, Bangaluru, INDIA 16-17 March, 2019, Links: <https://gnss.asia/new/golden-medal-for-rail-safety-application-galileo-hackathon-bangalore/>, <https://www.youtube.com/watch?v=oHcVWfesAgI>
- Served as a **Mentor and Jury Member** in *Galileo and Smart RTK Hackathon*, Thailand Space Week, Bangkok, Thailand, August 26-27, 2019. Link: <https://gnss.asia/new/galileo-and-smart-rtk-hackathon-flashback/>
- Served as a **Mentor** in *Galileo Hackathon 2021*, <https://taikai.network/en/gnssasia/challenges/galileohackathons>
- **Member, Board of Studies (BoS)**, GNSS Course, Centre for Space Science and Technology Education in Asia and Pacific (CSSTEAP), Affiliated to United Nations, Dehradun, India
- Served as the **Joint Convenor** for “One-day workshop on GNSS/ NavIC” held during 5th URSI Regional Conference on Radio Science (URSI-RCRS 2022), Indian Institute of Technology Indore (IIT Indore), 1 December, 2022
- **Member, Panel 5/ LITD 22** of Bureau of Indian Standards (BIS) for **Indian standard on 'NavIC Receiver'**.

### OTHER ACTIVITIES/ RESPONSIBILITIES

- Serving as the **Convenor, Industry Institute Partnership Cell (IIPC)** [<http://iipc.buruniv.ac.in>], **Member, Institute Innovation Council (IIC)**, and as **Convenor, Career Guidance Cell (CGC)** [<http://cgc.buruniv.ac.in>], The University of Burdwan
- Currently serving as **Chairman, IETE Burdwan Sub Centre (2020-2022)**. Have taken active role **in running of Institute of Electronics and Telecommunication Engineers (IETE), Burdwan Sub Centre** as a member of the Executive Committee (Hony Secretary/ Treasurer/ Member).
- **SPOC**, SWAYAM-NPTEL Local Chapter, The University of Burdwan
- **Coordinator**, Nodal Centre for ISRO START Program, The University of Burdwan
- Serving as **Member, Local Advisory Committee (LAC)** to Burdwan Science Centre under National Council of Science Museums (NCSM)
- Successfully supported **organization of 06 National Conferences** (Convenor/ Joint Secretary)
- Participation of activities in Science Popularization and students’ co-curricular activities

## LIST OF JOURNAL PUBLICATIONS

- P1.** "Evaluation of GPS PDOP from elevation and azimuth of satellites", P Banerjee and **Anindya Bose**, *Indian J. Radio and Space Physics*, Vol. 25, No 2, April 1996, pp. 110 - 113.
- P2.** "A study on GPS PDOP and its impact on position error", P Banerjee, **Anindya Bose** and B S Mathur, *Indian J. Radio and Space Physics*, Vol 26, April 1997, No 2, pp 107 – 111.
- P3.** "Degradation of navigational accuracy with Global Positioning System during periods of scintillation at equatorial latitudes", T Bandyopadhyay, A Guha, A Das Gupta, P Banerjee and **A Bose**, *Electronics Letters, IEE, (UK)*, Vol 33, No 12, June 5, 1997, pp 1010 – 1011.
- P4.** "Study on the update rate of correction message to reduce SA effect in DGPS mode", P Banerjee, **Anindya Bose**, Somik Mukherjee, (Ms) A Guha (Bose) & B S Mathur, *Indian J Radio and Space Physics*, Vol 28, No 2, April 1999, pp 84 - 86.
- P5.** "Rectangular Active Microstrip Patch Antennas Revisited", B N Biswas, (Ms) A Bhattacharya, (Ms) S Pal, D Mondal, P Lahiri and **A Bose**, *J IETE*, Vol 45, No 2, March-April 1999, pp 135 - 145.
- P6.** "A semi-empirical model to improve the accuracy of GPS time", P Banerjee, **Anindya Bose** and B S Mathur, *Indian J Radio and Space Physics*, Vol 30, No. 5, October 2001, pp 243-248.
- P7.** "The usefulness of GLONASS for positioning in the presence of GPS in Indian subcontinent", P Banerjee, **Anindya Bose** and Ashish Dasgupta, *Navigation, J Instt of Navigation*, (UK), Vol 55, No 3, September 2002, pp 463 – 475, doi: 10.1017/S0373463302001960
- P8.** "Errors in position-fixing by GPS in an environment of strong equatorial scintillations in the Indian zone", A Dasgupta, S Ray, A Paul, P Banerjee and **A Bose**, *Radio Science (USA)*, Vol 39, No 1, RS 1S30, February, 2004, doi: <https://doi.org/10.1029/2002RS002822>
- P9.** "Effect of scintillation on timing application of GPS in Indian subcontinent", P Banerjee, **A Bose** and Ashish Dasgupta, *IEEE Trans. Instru. Meas.*, (USA), Vol 56, Issue 5, October, 2007, pp 1596 – 1600, DOI: <https://doi.org/10.1109/TIM.2007.904568>
- P10.** "A Study on the potentiality of GPS Timing Receiver for On-Line Applications", P Banerjee, Suman, A K Suri, Arundhati Chatterjee and **Anindya Bose**, *Measurement Science and Technology (UK)*, IOP Publishing, Vol 18, No 12, December 2007, pp 3811 – 3815, doi: <https://doi.org/10.1088/0957-0233/18/12/016>
- P11.** "Generating Chaos in Injection-synchronized Gunn Oscillator: An Experimental Approach", J Chakravorty, T Banerjee, R Ghatak, **A Bose**, B C Sarkar, *IETE J Research*, Vol 55, Issue 3, May – June, 2009, pp 106-111
- P12.** "Revitalized GLONASS Constellation Status in mid 2010", **Anindya Bose** and Shreya Sarkar, *European Journal of Navigation*, Vol 8, No 2, August 2010, pp 45 – 46
- P13.** "GALIEO-only Position Fix from India: First Experience", **Anindya BOSE**, Saikat Das, Rakesh Malik and Debipriya Dutta, *Coordinates*, Vol IX, Issue 9, September 2013, pp 37 -41, available online at: <https://mycoordinates.org/galileo-only-position-fix-from-india-first-experience/>
- P14.** "A Study on Satellite Geometry Variation for Multi-GNSS from India", **Anindya BOSE**, (Ms) Keka Hazra and (Ms) Shreya Sarkar, *International Journal of Engineering Research*, Vol 3, Issue 10, October 2014, pp 575-579
- P15.** "Studies on revitalized GLONASS from India", **Anindya Bose**, Shreya Sarkar, Keka Hajra, Debipriya Dutta and A Bhattacharya, *Coordinates*, Vol XI, Issue 5, May 2015, pp 37 – 42; available online at <http://mycoordinates.org/studies-on-revitalized-glonass-from-india/>
- P16.** "Development of a GNSS based Multipurpose System", **Anindya BOSE**, Rakesh Malik, Saikat Das, A Bhattacharya, *Technia International Journal of Computing and Communication Technology*, Vol 8, No 1, July 2015, pp 1066 – 1070; available online [http://www.techniajournal.com/images/stories/july-2015/03-Development\\_of\\_a\\_GNSS\\_based\\_Multipurpose\\_System.pdf](http://www.techniajournal.com/images/stories/july-2015/03-Development_of_a_GNSS_based_Multipurpose_System.pdf)
- P17.** "Contribution of GLONASS in Multi-GNSS Solution Accuracy", Shreya Sarkar and **Anindya Bose**, *Coordinates*, Vol XI, Issue 10, October 2015, pp 13-16; available online <http://mycoordinates.org/contribution-of-glonass-in-multi-gnss-solution-accuracy/>
- P18.** "Studies on Solution Accuracy of GLONASS from India", Shreya Sarkar and **A Bose**, *Gyroscopy and Navigation*, Vol 7, No 1, pp 39-49, Jan 2016, (*Giroskopiya i Navigatsiya*, 2015, No. 4, pp. 117–130), DOI: 10.1134/S2075108716010119, <https://link.springer.com/article/10.1134/S2075108716010119>



- P19.** “GNSS education: Issues and Challenges”, Bernd Eissfeller, Chris Rizos, Fabio Dovis, Nobuaki Kubo, Reha Metin Alkan and **Anindya Bose**, *Coordinates*, Vol XII, Issue 2, February 2016, pp 10-16, available online <http://mycoordinates.org/gnss-education-issues-and-challenges/>
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