

**: FACULTY DETAILED RESEARCH DATA:**

**Name of the Faculty: Dr. Arijit Das**

**Designation: Assistant Professor**

**Department: Mathematics**

**School: Basic Sciences**

**Research Area: Fluid Dynamics, Integral Equations.**

**Details of research portfolio of faculty:**

**A. Researcher's ID details:**

Google Scholar ID: JDzJP8EAAAAJ

Orchid ID: 0009-0000-5387-2230

Scopus ID: 57216139762

Vidwan ID: 525849

**B. Publication details:**

**1. Conference proceedings/ Conference paper:**

Sl. No.	Name of the Conference	Title of the paper	Month & Year of Publication	Author(s) Name	National/ International	doi number (if any)	ISSN/ISBN no.
1.	International Conference on HYDROELASTICITY IN MARINE TECHNOLOGY	Effects of Flexible Bottom on Generation of Surface Waves by an Oscillatory Disturbance	November, 2022	Selina Hossain, Arijit Das and Soumen De	International		978-88-7617-054-6
2.	International Conference on Mathematics and Computing	Wave structure interaction problem on an immersed prolate spheroid in the presence of surface tension	September 2025	Anuradha Biswas, Arijit Das and Soumen De	International		978-981-96-6350-7

3.	International Conference on Mathematical Modeling and Computational Science	Application of Differential Transform Method for Solving Some Classes of Singular Integral Equations	August 2023	Subhabrata Mondal, Arijit Das, Sonjoy Pan, Biman Sarkar & Santu Ghorai	International	<a href="https://doi.org/10.1007/978-981-99-3611-3_17">https://doi.org/10.1007/978-981-99-3611-3_17</a>	978-981-99-3610-6
4.	International Conference on Mathematical Modeling and Computational Science	Wave Scattering by Thin Multiple Bottom Standing Vertical Porous Walls in Water of Uniform Finite Depth	August 2023	Biman Sarkar, Priya Sharma, Santu Ghorai, Arijit Das, Subhabrata Mondal & Sonjoy Pan	International	<a href="https://doi.org/10.1007/978-981-99-3611-3_24">https://doi.org/10.1007/978-981-99-3611-3_24</a>	978-981-99-3610-6

## 2. Publications in SCI/Scopus indexed Journals:

Sl. No	Name of the Journal (mention SCI/scopus)	Title of the paper	Month & Year of Publication	Author(s) Name (Highlight the corresponding and 1 <sup>st</sup> author in every article)	doi number	Issue No. &Volume No.	Page no.	ISSN of the journal
1.	<i>The Quarterly Journal of Mechanics and Applied Mathematics</i>	Radiation of waves by a thin cap submerged in ice covered ocean	September 2020	Arijit Das, Soumen De and B.N. Mandal	<a href="https://doi.org/10.1093/qjmam/hba011">https://doi.org/10.1093/qjmam/hba011</a>	73(4)	261-278	1464-3855
2.	<i>Waves in Random and Complex Media</i>	Small Amplitude Water Wave Propagation Through Mangrove Forests Having Thin Viscoelastic Mud Layer	September 2020	Arijit Das, Soumen De and B.N. Mandal	<a href="https://doi.org/10.1080/17455030.2020.1817624">https://doi.org/10.1080/17455030.2020.1817624</a>	32(3)	1251-1268	1745-5030

3.	<i>Journal of Applied Fluid Mechanics</i>	Wave Motion through Mangrove Forests in the Presence of a Viscoelastic Bed Due to a Line Source	<b>July 2021</b>	Arijit Das, Soumen De and B.N. Mandal	<a href="https://doi.org/10.47176/jafm.14.04.31980">https://doi.org/10.47176/jafm.14.04.31980</a>	<b>14(4)</b>	1269-1282	<b>1735-3645</b>
4.	<i>Studies in Applied Mathematics</i>	Radiation of waves by a submerged nearly circular rough plate in ice covered ocean	<b>June 2021</b>	Arijit Das, Soumen De and B.N. Mandal	<a href="https://doi.org/10.1111/sapm.12414">https://doi.org/10.1111/sapm.12414</a>	<b>147(3)</b>	935-954	<b>1467-9590</b>
5.	<i>Meccanica</i>	Radiation and scattering of flexural-gravity waves by a submerged porous disc	<b>April 2022</b>	Arijit Das, Soumen De and B.N. Mandal	<a href="https://doi.org/10.1007/s11012-022-01510-y">https://doi.org/10.1007/s11012-022-01510-y</a>	<b>57</b>	1557-1573	<b>1572-9648</b>
6.	<i>Journal of Fluids and Structures</i>	Radiation of water waves by a heaving submerged disc in a three-layer fluid	<b>May 2022</b>	Arijit Das, Soumen De and B.N. Mandal	<a href="https://doi.org/10.1016/j.jfluidstructs.2022.103575">https://doi.org/10.1016/j.jfluidstructs.2022.103575</a>	<b>111</b>	103575	<b>0889-9746</b>
7.	<i>Applied Mathematical Modelling</i>	Wave interaction with an elliptic disc submerged in a two-layer fluid	<b>May 2023</b>	Arijit Das, Soumen De and B.N. Mandal	<a href="https://doi.org/10.1016/j.apm.2023.01.016">https://doi.org/10.1016/j.apm.2023.01.016</a>	<b>117</b>	786-801	<b>1872-8480</b>

<b>8.</b>	<i>Archive of Applied Mechanics</i>	Generation of waves by moving oscillatory pressure disturbances in presence of porous bottom	<b>July 2022</b>	Selina Hossain, Sandip Paul, Soumen De, Arijit Das	<a href="https://doi.org/10.1007/s00419-022-02212-3">https://doi.org/10.1007/s00419-022-02212-3</a>	<b>92(9)</b>	2713-2731	<b>1432-0681</b>
<b>9.</b>	<i>Geophysical &amp; Astrophysical Fluid Dynamics</i>	The influence of flexible bottom on wave generation by an oscillatory disturbance in the presence of surface tension	<b>May 2023</b>	Selina Hossain, Arijit Das and Soumen De	<a href="https://doi.org/10.1080/03091929.2023.2207018">https://doi.org/10.1080/03091929.2023.2207018</a>	<b>117(3)</b>	177-212	<b>0309-1929</b>
<b>10.</b>	<i>Journal of Engineering Mathematics</i>	Gravity waves generated by an oscillatory surface pressure in a two-layer fluid with a porous bottom	<b>October 2023</b>	Selina Hossain, Arijit Das, Soumen De, and B.N. Mandal	<a href="https://doi.org/10.1007/s10665-023-10298-z">https://doi.org/10.1007/s10665-023-10298-z</a>	<b>143</b>	<b>2</b>	<b>1573-2703</b>
<b>11.</b>	<i>Physics of Fluids</i>	Water Wave Interaction with a Submerged Porous Disc in a Two-Layer Fluid	<b>February 2025</b>	Arijit Das and Soumen De	<a href="https://doi.org/10.1063/5.0255719">https://doi.org/10.1063/5.0255719</a>	37	<b>027158</b>	<b>1089-7666</b>
<b>12.</b>	<i>Physics of Fluids</i>	Wave diffraction by axisymmetric and nonaxisymmetric prolate spheroid submerged in infinite depth water having surface tension	<b>February 2025</b>	Anuradha Biswas, Arijit Das and Soumen De	<a href="https://doi.org/10.1063/5.0273734">https://doi.org/10.1063/5.0273734</a>	37,	077140	<b>1089-7666</b>

### 13. Book chapter:

Sl. No.	Title of the book	Publishers	Author(s) Name (Highlight the corresponding and 1 <sup>st</sup> author in every article)	Year	ISBN No.	doi no. (if applicable)
1.	Dispersion Equation & It's Solution for Single	Integrated Publications	<b>Arijit Das</b>	2024	978-93-5834-	<a href="https://doi.org/10.6277/8/int.book.450">https://doi.org/10.6277/8/int.book.450</a>

	Layer Fluid with Surface Tension Having an Inertial Surface				625-1	
2.	A Study on Internal Wave Velocity in a Two-Layer Fluid Medium in Context of the Solution of Dispersion Equation	Integrated Publications	<b>Arijit Das</b>	2024	978-93-5834-625-1	<a href="https://doi.org/10.6277/8/int.book.450">https://doi.org/10.6277/8/int.book.450</a>
3.	A note on solution of the dispersion equation for small-amplitude internal waves in three-layer fluid	CRC Press Taylor & Francis Group	<b>Anuradha Biswas &amp; Arijit Das</b>	2025	978-10-3294-682-5	<a href="https://doi.org/10.1201/9781003596745-71">https://doi.org/10.1201/9781003596745-71</a>
4.	A small note on the dispersion equation and it's roots for waves in mangrove forests in presence of surface tension	CRC Press Taylor & Francis Group	<b>Arijit Das &amp; Anuradha Biswas</b>	2025	978-10-3294-682-5	<a href="https://doi.org/10.1201/9781003596745-71">https://doi.org/10.1201/9781003596745-71</a>
5.	Wave Scattering by an axisymmetric spheroid submerged Below a Free Surface	Akinik Publications	<b>Arijit Das</b>	2024	978-93-6135-429-8	<a href="https://doi.org/10.22271/ed.book.2938">https://doi.org/10.22271/ed.book.2938</a>
6.	Wave Scattering of non-axisymmetric spheroidal body Below a Free Surface	Akinik Publications	<b>Arijit Das</b>	2024	978-93-6135-429-8	<a href="https://doi.org/10.22271/ed.book.2938">https://doi.org/10.22271/ed.book.2938</a>

#### 4. Text/Reference book published from reputed national/international publishers:

Sl. No.	Title of the Text/Reference book	Publishers	Author(s) Name (Highlight the corresponding and 1 <sup>st</sup> author in every article)	Year	ISBN No.	doi no. (if applicable)

#### 5. Project granted:

			<b>Duration</b>	
--	--	--	-----------------	--

Sl. No	Sponsoring Agency	Name of the project	Starting Month & Year	Ending month & Year	Amount in Lakhs	PI/ CO- PI

**6. Consultancy Project Grant:**

Sl No.	Project title	Funding Agency	Duration	Completed (yes/no)	Sanctioned amount (in Rs.)	PI and CO- PI (if any)

**7. Patent/IPR granted:**

Sl. No.	Name of the patent	Name of the applicant	Name of the inventor	Date of File	Date of Publication	Whether Granted (yes/no); If yes, Date of Grant	Application No.