

1. Name: Dr. Kalyan Kumar Das
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Dr. Kalyan Kumar Das
 Professor (CAS)
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 Assam Engineering College
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5. Educational Qualification:

Serial no.	Degree/Year	University	Class	Specialization	Rank
1	B.E.Hons (1993)	Gauhati	First Class First	Mechanical	First Rank with Gold Medal by Gauhati University
2	M.M.E (1996)	Jadavpur	First	Mechanical (Appl. Mech.)	
3	M.Tech (1999)	IIT Khargpur	First	Aerospace Engineering	First Rank
4	Ph.D (2012)	IIT Kharagpur	-----	Computational Fluid Mechanics	

6. Professional Qualification:

6a. Teaching Experience:

- i. Worked as Lecturer in the Department of Mechanical Engineering of Assam Engineering College (Under Government of Assam), Guwahati from 03-04-1996 to 02-04-2009
- ii. worked as Associate Professor in the Department of Mechanical Engineering of Assam Engineering College (Under Government of Assam), Guwahati from 03-04-2009 to 09-03-2016
- iii. working as Associate Professor in the Department of Industrial and Production Engineering of Assam Engineering College w.e.f 20.03.2017
- iv. Promoted to the rank of Professor w.e.f 14-02-2015 vide Government of Assam notification ATE 69/2020/31 dated 15-02-2021 under CAS.
- v. **Appointed as Principal of Golaghat Engineering College vide Government of Assam Notification eFile no 677797/28 dated 20-07-2025 with first nomination for the post of Principal of Government Engineering Colleges by AESRB vide ASERB/068/2024/1088 dated 19-07-2025**

6b. Administrative Experience:

Registrar of Assam Science and Technology University (ASTU), Guwahati from 10-03-2016 to 20.03.2017. **Assam Science and Technology University** is a State University established on 4th January, 2010 by the Assam Science and Technology Act 2009 and notified by the Govt. of Assam vide letter No. ATE.222/2008/48, dated 26th Feb, 2010

Officiated as

- i. Member of the BOG of the Girijananda Choudhury Institute of Management and Technology (GIMT), Guwahati
- ii. Member of the BOG of the Girijananda Choudhury Institute of Management and Technology (GIMT), Tezpur.
- iii. Member of the BOG of the Board of Practical training (BOPT) Kolkata
- iv. **Member of the BOS** of Mechanical Engineering of Assam Science and Technology University ASTU/BOS/ME/2018/433 dated 11-04-2025

- v. **Chairman of the BOS of Industrial and Production Engineering** of Assam Science and Technology University (ASTU/BOS/IPE/2018/468 dated 06-05-2025)

7. Research Paper Published:

Total research paper published: 95

International Journal Paper: **41**

Proceedings of the International Conferences: **22**

Proceedings of the National Conferences: **32**

Total training attend: **35**

8. Invited Lectures delivered

1. "Report on the Ferry sinking incident in Assam on April 30th 2012" at the International Workshop on Tornado risk Reduction 2013 held in Dhaka, 12-16 January 2013 and sponsored by Tokyo Polytechnic University, Japan and Bangladesh Disaster Preparedness Center (BDPC).
2. Invited lecture on "Tornado disaster" in a public meeting organized by Tokyo Polytechnic University at Tangail, Bangladesh, 15th January 2013.
3. "Numerical and Experimental Simulation of the dry thunderstorm downburst using 3D LES" National Conference on Wind Engineering, 14-15th December 2012, New Delhi, India and Co-Chaired the Technical Session 4.
4. "Damage Potential of extreme wind events" National Conference on Emerging Global Trends in Engineering and Technology, 7-8th March 2014, Don Bosco University, Guwahati and Chaired the Technical Session 2.

5. “Numerical and Experimental simulation of thunderstorm downburst”
Short term course on Introduction to Numerical, Computational and Experimental Mechanics under NEQIP of AICTE held from 9th-13th December 2014 at Assam Engineering College, Guwahati.
6. Chaired the technical session in the AICTE sponsored National Seminar on “Disaster Management; Issues and Challenges” held on 3-4th November 2015 at Guwahati, organized by Girls’ Polytechnic Guwahati and Assam State Disaster Management authority, Government of Assam.
7. Delivered a lecture on “ Numerical Simulation for fluid flow over Prismatic building” in the Workshop on “Introduction to Simulation of Mechanical System by using ABAQUS and MATLAB” held on 24-09-2016 at Assam Don Bosco University, Azara Guwahati.
8. Panel member for the seminar for the selection of best speaker in the department of mechanical engineering organized by Assam Downtown University, Guwahati on 28th January 2018.
9. Delivered a lecture on “Damage potential of downburst” as a key note speaker at the National Seminar on Wind Engineering (NSWE 2018) organized by PCPS Girls’ Polytechnic, Guwahati and Indian Society of Wind Engineering (ISWE) on 8-9th February 2018.
10. Delivered a lecture on “CFD in building design” as invited speaker at the National Conference on Recent advances in Science and Technology (NCRAST 2018) organized by Assam Science and Technology University on 15-17th March 2018 at Guwahati under TEQIP-III.
11. Delivered a lectured on “ Application of Mathematical modeling in wind Engineering problems” as invited speaker at B.Barooah college, Guwahati on 24.10.2024

9. Paper presented in foreign countries:

1. “Development of a numerical code to estimate the microburst wind profile near a prismatic building” 5th International symposium on wind effects on buildings and urban environments, ISWE, 7-8th March 2011, Tokyo, Japan.
2. “Development of Numerical code for the simulation of translational downburst” 13th International Conference on Wind Engineering 2011, Amsterdam, the Netherlands , July 10-15, 2011.
3. “Report on the Ferry sinking incident in Assam on April 30th 2012” at the International Workshop on Tornado risk Reduction 2013 held in Dhaka, 12-16 January 2013
4. Invited lecture on “Tornado disaster” in a public meeting organized by Tokyo Polytechnic University (TPU), Japan at Tangail, Bangladesh, 15th January 2013. **Lecture delivered as a member of the international team constituted by Tokyo Polytechnic University Japan to access the damage due to tornado disaster at Rampur village, Tangail, Bangladesh.**

10. Seminar/Conferences organized :

1. International Symposium on “Wind Disaster Problems” at Royal Group of Institution, Guwahati from February 21-22, 2013 sponsored by ISWE & AICTE.
2. International Workshop on “Wind Engineering- Prospects and Challenges” at Assam Engineering College, Guwahati on 23rd February 2013.
3. Short term course on Introduction to Numerical Computational and Experimental Mechanics (INCEM 2014) at Assam Engineering College from 9th- 13th December 2014 under NEQIP scheme of AICTE.

4. National Seminar on “Green Energy – Prospects and Challenges” at Assam Science and Technology University, Guwahati from 26th -27th April 2016.
5. National Seminar on Wind Engineering (ISWE2018) at PCPS Girls’ Polytechnic to be held from 8-9 February 2018

11. Reviewer of International /National Journal:

1. International Journal of wind Engineering and Industrial Aerodynamics.
2. International Journal of Applied Fluid Mechanics
3. Journal of Industrial Safety Engineering (ISSN: 2395-6674, STM Journals)
4. Journal of Structural Engineering and Management (STM)
5. Springer KSCE journal of Civil Engineering (ISSN 1226-7988)
6. Springer journal of Environmental fluid mechanics (ISSN:1567-7419)
7. Indian Journal of Science and Technology (ISSN:0974-6846)

12. Reviewer of International/National Conferences

Reviewed paper of the Asia Pacific Conference on Wind Engineering (APCWE13) held in Chennai in December 2013, India.

Reviewed papers of the National Conference on Emerging Global Trends in Engineering and Technology (EGTET 2014), held in Guwahati, 7-8th March, Don Bosco University, Guwahati.

13. Member of the Journal Editorial board

Journal of Industrial Safety Engineering (ISSN: 2395-6674, STM Journals)
Journal of Structural Engineering and Management (STM Journals)
International Journal of advanced research in Civil Engineering

14. **Sponsored Research Project undertaken as PI and Co-PI :**

1. Title of the Project: Investigation of the effect of wind shear due to thunderstorm on different structures. (AICTE/RPS 115/2007-2008)
2. Tea Processing using Bio mass Gasifier. (AICTE/RPS 209/2007-2008)

15. **Books and Books Chapter contributed:**

Contributed a Chapter on “CFD simulation of Thunderstorm Downburst Wind field” in the book on “New Approaches of Basic Science towards the development of Engineering and Technology” ISBN No.978-93-80408-71-2, Published by Acme Learning (Excel Books) of New Delhi, INDIA.

16. **M.Tech thesis guided:**

1. “Experimental and Numerical Investigation of Wind flow over Prismatic Building” **Bora Manas**, July 2010.
2. “Numerical Investigation of wind Flow over Prismatic Building in Tandem Arrangement, **Deka Rupam**, July 2011.
3. “Numerical Investigation of wind Flow over Buildings in Tandem Arrangement using ANSYS” **Das Hirak Ranjan**, June 2012.
4. “ Numerical Investigation of Incompressible flow inside a Lid Driven Cavity” **Baruah Jitul**, July 2013.
5. “Physical Simulation of Tornado like vortex using double fan model” **Baruah Bhabajit**, July 2013.
6. “ Numerical Investigation of Flow around a rectangular cylinder using ANSYS” **Franky Kumar Kalia**, January 2015.
7. “Numerical investigation of pollution dispersion from a chimney subjected to synoptic and microburst like winds”, **Pantha Pradip Das**, 2018
8. “Computational and experimental investigation of aircraft propeller efficiency”, **Anghuman Tamuli**, 2023
9. “Study of Mechanical properties of a 3D printed PLA honeycomb cellular structure with variation in layer thickness”, **Pankaj Sarma**, 2023
10. “Numerical investigation of pollutants entrainment due to wind flow over earth fixed prismatic structure”, **Hridesh Kumar Shrotriya**, 2020 (Energy Engineering)
11. “Numerical modeling of Turbine Blade aerodynamics in subsonic flow and optimization of blade profile” **Rahul Baruah (2024)**

12. “ Airfoil analysis using Design by Morphing under Moist Condition”,
Namrata Deka Baruah, ASTU Roll no. 230620002006 (2025)

17. Doctoral guidance:

Ph.D awarded:

1. Hirak Ranjan Das (2021)

Topic: “ Numerical and Experimental investigation of macro flow dynamics due to wind over earth fixed structures”

2. Rupam Deka(2023)

Topic:“ Investigation of macro flow dynamic effect of synoptic wind on internal and external flows in Gable roof buildings with openings”

3. Jitul Baruah (2024)

Topic:“ Numerical Investigation to study the smoke flow dynamics in some underground car parking area using jet fan ventilation system”

4. Koutuvmoni Bharadwaj (2025)

Topic:“ Separation of municipal solid waste based on their biodegradability using triad spectroscopy sensor”

Thesis submitted :

Franky Kumar Kalia (2025)

Topic: “Investigation of macro Flow Dynamics of Wind Flow in pyramidal Building Subjected to Synoptic Wind Condition”

Current Ph.D students:

**Sahul Muhique
Piyush Singh,
Baharul Islam Barbhuyan**

B.Tech thesis supervised : More than 50

18. Total Training Program/Seminar attended: 35 (As per annexure I)

19. Awards/Prizes: Gold medal from Gauhati University, Guwahati for securing first rank in B.E (Mechanical) Examination in the year 1993.

PAPERS FROM INTERNATIONAL JOURNALS

- 1 **Das K.K, Ghosh A.K., Sinhamahapatra K.P., 2010**, Investigation of the axisymmetric microburst flow field, Journal of Wind and Engineering (ISSN: 0973- 0613), Vol. 7, no. 1, Jan 2010, pp 1-15.
2. **Das K.K, Ghosh A.K., Sinhamahapatra K.P., 2011**, Physical Simulation of dry microburst using impinging jet model with swirl, International journal of Engineering Science and Technology (ISSN: 2141-2820), Vol. 3, no. 5, 2011, pp 20-29.
3. **Das K.K, Ghosh A.K., Sinhamahapatra K.P., 2010**, Development of a numerical code for the simulation of dry downburst with using jet model,

Int. Journal of Applied Mathematics and mechanics (ISSN: 0973- 0184), Vol. 7, no. 16, 2011, pp 56-71.

4. **Das K.K, Ghosh A.K., Sinhamahapatra K.P., 2011**, Experimental and Numerical simulation of the Translational Downburst using impinging jet model, International journal of Engineering Science and Technology (ISSN: 0975-5462), Vol. 3, no. 6, 2011, pp 4656-4667.
5. **Das K.K, Ghosh A.K., Sinhamahapatra K.P., 2011**, Experimental and Numerical investigation of the Downburst wind profiles on different surfaces, International journal of Engineering Science and Technology (ISSN: 0975-5462), Vol. 3, no. 6, 2011, pp 4668-4682.
6. **Das K.K, Ghosh A.K., Sinhamahapatra K.P., 2014**, Numerical and Experimental investigation of the dry Thunderstorm Downburst using 3D LES”, International Journal of Applied Mathematics and mechanics (ISSN: 0973- 0184) Vol. 10 no. 6, pp 35-55.
7. **Das K.K., 2013**, Investigation of the ferry disaster incident of Assam (India) on 30th April 2012, Journal of Disaster Research (ISSN : 1881- 2473, Published by Fuji Press, Japan), Vol. 8 no. 6, pp 1068-1070.
8. **Das K.K, Ghosh A.K., Sinhamahapatra K.P., B. Baruah, 2014**, Physical Simulations of Downburst and Tornado”, International Journal of Applied Mathematics and mechanics (ISSN: 0973- 0184) Vol. 10 no. 6, pp 1-34.
9. **Das K.K, Ghosh A.K., Sinhamahapatra K.P.,2014**, “Interference effect between prismatic buildings subjected to microburst wind”, Journal of Industrial Safety Engineering, Vol. 1 No.1, pp 23-31 (ISSN:2395-6674).

10. **Das H.R, Das K.K, Ghosh A.K., 2014**, “Numerical investigation of the interference effect of Prismatic buildings placed in tandem arrangement due to synoptic wind profile”, International Journal of Applied Mathematics and mechanics (ISSN: 0973- 0184), Vol. 10, Issue 12, pp 41-59, 2014.
11. **Das K.K, 2014**, “Numerical investigation of the dry thunderstorm downburst line using 3D LES”, International Journal of Applied Mathematics and mechanics (ISSN: 0973- 0184) Vol. 10, Issue 12, pp 24-40, 2014.
12. **Das K.K. Das H.R, Ghosh A.K., Sinhamahapatra K.P, 2016**, “ Damage Potential of Extreme wind events – Downburst and Tornado”, Journal of Aerospace Engineering and Technology (ISSN: 2348-7887), Vol:6, no.2,pp 28-46,2016
13. **Gogoi A, Das K K, 2016**, Investigation of a Possibly EF2 Tornado That had occurred in the city of Shillong (India) on the 5th of April 2016”, Journal of Aerospace Engineering and Technology (ISSN: 2348-7887), Vol:6, no.2,Case study,2016
14. **Das H.R, Das K.K, 2017**, Numerical investigation of the downburst wind on buildings with various geometrical shape”, Journal of Aerospace Engineering and Technology (ISSN:2348-7887), Vol.7,no.2,pp34-41
15. **Deka R, Das K.K, 2017**, Numerical investigation of unsteady incompressible viscous flow over flat plate having rectangular obstruction using vorticity stream function approach, International Journal of advance research in science and Technology(IJARSE)(ISSN:2319-8354, Vol.06,issue 11.
- 16 **Das P.P, Das Kalyan Kumar, 2017**, “Numerical investigation of fluid flow inside a rectangular driven cavity at moderate Reynolds number” Journal of Aerospace Engineering and Technology (ISSN: 2348-7887) VOL 7, NO 3, pp 46-60
- 17 **Das H.R, Das Kalyan Kumar,Patowary Ajan, 2017**, “A study on C,H and L type of prismatic buildings for wind flow” International journal of

construction Engineering and Planning (ISSN: 2456-2335) VOL 7, NO 3, pp 6-10

- 18 . **Das Kalyan Kumar, Das H.R, 2018**, “Numerical investigation of macro flow dynamics of downburst wind over buildings and the interference effect” Journal of Aerospace Engineering and Technology (ISSN: 2348-7887) Vol-8,No1.
- 19 **Das H.R, Das K.K., 2019**, “Optimization of Roof Angle for Sloping Roof Buildings under Extreme Wind Conditions”, Journal of Construction Engineering Technology and Management, ISSN 2249-4723, Vol.9 Issue1, pp 1-5
- 20 **Das H.R, Bhatia D, Das K.K., Mishra A, 2020**, “Development of Vioreaper sanitization chamber for COVID 19”, KaEi journal Sensors international (Elsevier) (<http://doi.org/10.1016/i.sintl.2020.100052>).
- 21 **Baruah Jitul, Banashri Thakuria, Das K.K , 2021**, “Numerical investigation for optimization of number of blades of a jet fan used in the underground car parking”, International Journal of All Research Education &Scientific Methods (ISSN:2455-6211), Volume 9, Issue 6
- 22 **Barman S, Das H.R, Das K.K, 2022**, “Temperature characteristics of semi transparent Photovoltaic module in a Ventilated double Pane Window system”, Recent trends in Civil Engineering and Technology (ISSN 2321-6476) DOI 10.37591/RTCET, Volume 12 issue 1,pp 1-10
- 23 **Koustuvmoni Bharadwaj, Das Kalyan Kumar, 2022**, “ A review of the reported technologies to segregate Municipal Solid Waste into Dry and Wet Waste Based on their moisture”, Journal of Geotechnical Engineering , ISSN :2394-1987, Vol 9, Issue 3, 2022 DOI of journal: 10.37591/JoGE
- 24 **Deka Rupam, Das Kalyan Kumar, 2023**, “ Macro Flow Dynamic Study of Wind Around a Gable Roof Building with Openings”, International journal of Multidisciplinary Research, ISSN 2582-2160 DOI: <http://doi.org/10.36948/ijfmr.2023>

- 25 Baruah Jitul, Bhargav Borah, Das Kalyan Kumar, 2023, “ Study on Improvement of air quality in Underground car parking area using jet fan”, I journal of Transport Engineering and applications, ISSN 2394-7284 DOI of the journal: 10.37591/TTEA,**
- 26 Baruah Jitul, Banashri Thakuria, Das K.K , 2021, “Numerical investigation for optimization of number of blades of a jet fan used in the underground car parking”, International Journal of All Research Education &Scientific Methods (ISSN:2455-6211), Volume 9, Issue 6**
- 27 Barman S, Das H.R, Das K.K, 2022, “Temperature characteristics of semi transparent Photovoltaic module in a Ventilated double Pane Window system”, Recent trends in Civil Engineering and Technology (ISSN 2321-6476) DOI 10.37591/RTCET, Volume 12 issue 1,pp 1-10**
- 28 Koustuvmoni Bharadwaj, Das Kalyan Kumar, 2022, “ A review of the reported technologies to segregate Municipal Solid Waste into Dry and Wet Waste Based on their moisture”, Journal of Geotechnical Engineering , ISSN :2394-1987, Vol 9, Issue 3, 2022 DOI: 10.37591/Joge.v9i3.6851**
- 29 Deka Rupam, Das Kalyan Kumar, 2023, “ Macro Flow Dynamic Study of Wind Around a Gable Roof Building with Openings”, International journal of Multidisciplinary Research, ISSN 2582-2160 DOI: <http://doi.org/10.36948/ijfmr.2023>**
- 30 Baruah Jitul, Bhargav Borah, Das Kalyan Kumar, 2023, “ Study on Improvement of air quality in Underground car parking area using jet fan”, I journal of Transport Engineering and applications, ISSN 2394-7284 DOI of the journal: 10.37591/TTEA,**
- 31 Baruah Jitul, Himalay Sonowal, Das Kalyan Kumar, 2023, “ Experimental and Numerical Study of smoke flow Dynamics in a scaled down model of an underground car parking area by using jet fan ventilation system”, International journal of Transport Engineering and Traffic system, ISSN 2456-2343, Vol 9, Issue 1, 2023 DOI of the journal: 10.37628/IJTETS**

- 32 Deka Rupam, Das Kalyan Kumar, Dipankar Das** 2024, “ Numerical investigation of cross ventilation flow in A Gable roof building with asymmetric opening positions”, International journal integrated Research (eSCI), ISSN 2600-7916 DOI: <http://doi.org/10.30880/ijie.20234.16.05.007>, Vol. 16 no 5. pp 71-87
- 33 Deka Rupam, Das Kalyan Kumar, Das Dipankar, Saikia Madhurjya** 2024, “A comparative study on the natural ventilation performance in buildings with different roof shapes”, International journal of Natural and Engineering Sciences, E ISSN: 2146-0086 18(1), pp 32-44 (Web of science)
- 34 Koustuvmoni Bharadwaj, Das Kalyan Kumar,** 2024, “ Segregation of Municipal Solid Waste Based on Their Biodegradability using Spectroscopy Sensor”, Journal of IEEE Sensor Letters (SCI-E and Scopus, ISSN :2475-1472, Vol 8, Issue 8, 2022 DOI: <http://dx.doi.org/10.1109/LSENS.2024.34273>
- 35 Koustuvmoni Bharadwaj, K Bharadwaj, Das Kalyan Kumar,** 2024, “Rapid Estimation of Soil Mixture Using Spectroscopic Sensor”, Communications in Soil Sciences and Plant Analysis (Taylor & Francis, SCI journal), DOI: <https://doi.org/10.1080/00103624.2024.2426642>
- 36 Franky Kumar Kalia, K K Das,** 2024, “Investigation of inner and outer flow field characteristics of pyramidal roof rectangular base building due to synoptic wind flow through it by changing the vertical location of the asymmetric opening”, Nanotechnology Perceptions Vol. 20, pp 3461-3488, ISSN 1660-6795 (SCOPUS INDEXED)
- 37 Franky Kumar Kalia, K K Das,** 2024, “Investigation of inner and outer flow field characteristics of pyramidal roof rectangular base building due to synoptic wind flow through it by changing the roof pitch of the building”, Nanotechnology Perceptions Vol. 20 (S16), pp 806-834, ISSN 1660-6795 (SCOPUS INDEXED)
- 38 Franky Kumar Kalia, K K Das,** 2024, “Investigation of inner and outer flow field characteristics of pyramidal roof rectangular base building due to synoptic

wind flow through it by changing the wall porosity of the building”, Journal of Electrical Systems(JED) ISSN 1112-5209 (SCOPUS INDEXED)

39 Namrata Deka Baruah, Dimbalita Deka, Kalyan Kumar Das, 2025, “Aerodynamic Analysis of NACA 2412 airfoil using ANSYS”, International Research Journal on Advanced Engineering and Management, eISSN: 2584-2854, DOI : 10.47392/IRJAEM.2025.0030

40 Franky Kumar Kalia, Basundhara Das and Kalyan Kumar Das, 2025, “ Investigation of inner and outer Flow field Characteristics of Pyramidal roof rectangular base building due to synoptic wind flow through it by changing the width and height of openings of outlet having same area of both inlet and outlet opening” International Journal of Multiphysics, ISSN: 1750-9548, Volume 18, No 4, 2024 (Scopus indexed)

41 Sahul Muhique, Kalyan Kalita, Kalyan Kumar Das, 2025, “Analysis of submarine Hydrodynamics and NACA Aerofoils using Ansys Fluent” Journal of Offshore Structure and Technology, ISSN: 2349-8986, Volume12, Issue 2, DOI : 10.37591/JoOST

PAPERS FROM THE PROCEEDINGS OF INTERNATIONAL CONFERENCES

1.Das K.K, Ghosh A.K., Sinhamahapatra K.P., 2010, Development of a numerical Code for 3D LES simulation of thunderstorm downbursts, Proceedings of the CWE 2010, 23-27th May, Chapel Hill, North Carolina, USA. **Paper selected for Journal Publication.**

2.Das K.K, Ghosh A.K., Sinhamahapatra K.P., 2010 , Investigation of the Axisymmetric Dry Downburst Wind Profile on Different Surfaces,

Proceedings of the 2nd American Association on Wind Engineering Workshop.,
18-20th August 2010, Marco Island, Florida, USA.

3. **Das K.K, Ghosh A.K., Sinhamahapatra K.P, 2010**, Simulation of dry downburst, 14th Australasian Wind Engg. Society Workshop, 5-6th August, Canberra, Australia.

4. **Das K.K, Ghosh A.K., Sinhamahapatra K.P, 2011**, Development of a numerical code to estimate the microburst wind profile near a prismatic building, Proceedings of the 5th International symposium on wind effects on buildings and urban environments, ISWE, 7-8th March 2011, Japan.

5. **Das K.K, Ghosh A.K., Sinhamahapatra K.P, 2010**, CFD Simulation of the impinging jet with application to microburst wind field, Proceedings International Conference on Advances of Mechanical Engineering, NIT Surat, 4-6th January 2006, Surat, India.

6. **Das K.K, Ghosh A.K., Sinhamahapatra K.P, 2010**, Simulation of thunderstorm downburst, Proceedings of the 17AFMC, 5-7th December 2010, New Zealand.

7. **Das K.K, Ghosh A.K., Sinhamahapatra K.P, 2010**, Simulation of the dry microburst using impinging jet model, Proceedings of ICTACEM

2011, Pages 112-114, ISBN 93-80813-03-1, IIT Kharagpur, 27-29th December, India.

- 8 Das K.K, Ghosh A.K., Sinhamahapatra K.P, Das H.R, 2010**, Simulation of the dry microburst using ANSYS, Proceedings of ICTACEM 2011, Pages 538-541, ISBN 93-80813-03-1, IIT Kharagpur, 27-29th December, India.
- 9. Das K.K, Ghosh A.K., Sinhamahapatra K.P, 2011**, Development of numerical code for the simulation of translational downburst, Proceedings of the 13th International Conference on Wind Engineering 2011, Amsterdam, the Netherlands , July 10-15, 2011.
- 10. Das K.K, 2013**, Report on Ferry Disaster on 30th April 2012 in Assam due to Storm, International Workshop on Tornado Risk Reduction 2012, Dhaka, Bangladesh, January 12-14th, 2013.
- 11. Das K.K, Ghosh A.K., Sinhamahapatra K.P, 2013**, Experimental and Numerical Simulation of Downburst Wind using Impinging Jet Model , American Conference on Wind Engineering 2013 held in Seattle USA from June 16th-20th 2013.
- 12. Das K.K., Ghosh A.K., 2013**, Numerical Investigation of the Wind Profile during Downburst Lines using multiple impinging jet Model” Proceedings of The Eighth Asia-Pacific Conference on Wind Engineering, pp 1053-1064, ISBN 978-981-07-8011-1, December 10-14, 2013, Chennai, India.

13. **Das K.K, Ghosh A.K., Sinhamahapatra K.P, 2014**, “Numerical investigation of the interference effect between prismatic buildings subjected to downburst wind load” International Conference on Computational Wind Engineering CWE2014 to be held in Hamburg,Germany, June 8-12th , 2014.
14. **Das H.R, Das K.K, Ghosh A.K, 2014**, “A study of the Interference effects on a prismatic building due to a synoptic wind flow”, International Conference on Green Energy and Smart Materials through science, Technology and Management (GESM’14) held in Guwahati, India, 21-23rd January 2014.
15. **Das H.R, Das K.K, Pathak Jayanta, 2014**,”Numerical Simulation of Sloped roofed buildings for synoptic wind flow”, International Conference on Green Energy and Smart Materials through science, Technology and Management (GESM’14) held in Guwahati, India, 21-23rd January 2014.
16. **Das K K., Barthakur C, Baruah J, Barthakur A, 2014**, “Numerical Investigation of the flow inside a 3D driven cavity due to varying Aspect Ratio and Reynolds’number”, ICTACEM 2014, IIT Kharagpur.
17. **Das K.K, 2015** “ Numerical Investigation of the interference Effect of Prismatic buildings placed in tandem arrangement due to synoptic wind profile”, International Conference CISBAT, held on 9-11th September 2015 Lausanne, Switzerland,
18. **Das K K, 2015**, “Physical investigation of the interference effect of Prismatic buildings under synoptic wind”, International Conference PHYSMOD held on 7-9th September, Zurich, Switzerland.

19. **Das H.R, Das K.K, S. Jain.2016** “Optimization of slope for sloped roofed buildings under downburst wind flow using ANSYS”, International Conference on Recent Trends in Engineering and Material Sciences (17-19 March 2016), Jaipur National University, Jaipur, India
20. **Das H.R, Das K.K, S.Jain.2016**, “Effect of Downburst Windon Buildings with various Geometrical Shapes” International NAFEMS Conference on Engineering Analysis, Modeling, Simulation and 3D-Printing (NAFEMS-3D) – 2016” at Bangalore during 29-31 August 2016. **Awarded as the best paper of the conference.**
- 21 **Das K.K., 2016**, “Investigation of Damage Potential of Extreme Winds”, International Conference on Civil Engineering for sustainable Development –Opportunities and Challenges (CESDOC2016)”, to be held at Assam Engineering College, Guwahati-781013 from 19-21 December 2016.
22. **Rupam Deka, Das K.K, Borthakur P P, 2025**, “Numerical investigation of the influence of roof pitch on the natural ventilation efficiency”, 6th ICROME NIT Silchar, February 2025

PAPERS FROM THE PROCEEDINGS OF NATIONAL CONFERENCES

1. **Das K.K, Ghosh A.K., Sinhamahapatra K.P, 1999**, Theoretical Analysis of horizontal axis airscrew considering tip loss effect, Proceedings of National Conference on Wind Engineering, 2-4th December 1999, IIT Kharagpur, India
2. **Das K.K, Ghosh A.K., Sinhamahapatra K.P, 2006**, Experimental Simulation of dry downburst, Proceedings of 3rd National Conference of Wind Engineering., 5-7th January, Jadavpur University, Kolkata.

3. **Das K.K, Ghosh A.K., Sinhamahapatra K.P, 2008**, Simulation of Stationary dry thunderstorm microburst, Proceedings of 10th Annual CFD Symposium of AeSI (CFD Division), 11-12th August 2008, NAL, Bangalore.
4. **Das K.K, Ghosh A.K., Sinhamahapatra K.P, 2009**, Simulation of dry axisymmetric microburst flow field, Proceedings of 5th National Conference of Wind Engg., NIT Surat, 4-6th November. India.
5. **Das K.K, Ghosh A.K., Sinhamahapatra K.P, 2010**, CFD Simulation of Thunderstorm windfield, Proceedings of NABSET 2010, Don Bosco University, 12-13th March, Guwahati, India.
6. **Das K.K, Haloi D, Kalita A, 2011**, Experimental measurements and Numerical simulation of impinging with application to thunderstorm Downburst, Proceedings of 13th Annual CFD Symposium of Aeronautical Society of India, IISC Bangalore, 11-12th August 2011, Bangalore, India.
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31. **Das P.P, Das K.K, 2018**, “ Numerical investigation of fluid flow inside a rectangular driven cavity” in the proceedings of the Nation Seminar of Wind Engineering (NSWE2018) organized by PCPS Girls polytechnic, Guwahati

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32. **Das K.K, 2018**, “CFD in building design” as invited speaker at the National Conference on Recent advances in Science and Technology (NCRAST 2018) organized by Assam Science and Technology University on 15-17th March 2018 at Guwahati under TEQIP-III.

ANNEXURE I

TRAINING PROGRAM/SEMINARS ATTENDED

Sl. No.	Name of the Course	Organizing institute	Sponsors	Period	Remarks
1	Advanced Manufacturing Technology	Jadavpur University	IIT Kharagpur, DST	9-21 st June 1997	2 weeks
2	National Seminar on Wind Engineering	IIT Kharagpur	ISWE	2-4 th December 1999	
3	National Conference on Wind Engineering	Jadavpur University	ISWE	5-7 January 2006	
4	Development of Staff Training Program	NITTR Kolkata	-----	23-27 th July 2007	1 week
5	Modern Maintenance Practice	Assam Engineering Institute	ISTE	9-16 th June 2008	1 week
6	Faculty awareness Camp in Entrepreneurship	Assam Engineering Institute	ISTE	16-19 th June 2008	
7	10 th Annual CFD Symposium	NAL, Bangalore	IISc	11-12 August 2008	
8	National Conference on Wind Engineering	NIT Surat	ISWE	5-6 th November 2009	
9	Mechanical Engineering Education	IIT Guwahati	-----	7-11 th December 2009	1 week
10	New Approaches to Basic Science(NABSET)	DonBosco University, Guwahati	-----	12-13 th March 2010	
11	Material Mgt. and Purchase Procedure	NITTR Kolkata	-----	21-25 th June 2010	1 week
12	ICTACEM 2011	IIT Kharagpur	-----	27-29 th Dec. 2010	
13	5 th International symposium on wind	Tokyo Polytecnic University, Tokyo,	IAWE	7-8 th March 2011	

	effects on buildings and urban environments	Japan			
14	International Conference on Wind Engineering 2011	Iawe Amsterdam Holland	Iawe	10-15 th July 2011	
15	National Conference on Wind Engineering	CBRI, Roorkee IIT Roorkee	ISWE	14-15 th December, 2012	
16	International Workshop on Tornado Risk Reduction	TPU, Tokyo BDPC, Dhaka	Iawe	12-15 th January 2013	
17	International Workshop on Wind Disaster	RGI, Guwahati	ISWE	21-22 nd February 2013	
18	International Workshop on Wind Engineering	AEC, Guwahati	ISWE, STAR Cement	23-2-1013	
19	IPR Awareness in E&T	Institution of Engineers, Guwahati	-----	18-19 th March, 2013	
20	Regional Seminar cum Workshop	IIT Kharagpur	MHRD	4-4-2013	
21	EGTET 2014	Don Bosco University	---	7-8 th March 2014	
22	Short term course on Fluid Powered System	NITTR Kolkata	MHRD	24-11-2014 to 28-11-2014	1 week
23	INCEM 2014	Assam Engg. College	AICTE	09-12-2014 to 13-12-2014	1 week
24	NEQIP STC	Electrical Engg., AEC	AICTE	19-1-2015 to 23-1-2015	1 week
25	NEQIP STC	Chemical Engg., AEC	AICTE	09-02-2015 to 13-02-2015	1 week
26	MSME-AEC meet	Mechanical Engineering	AICTE	12-05-2016	
27	National Conference on Emerging trends	Mechanical Engineering	RSET	28-04-2016 to 29-04-2016	
28	Theory of Machines	Mechanical Engg.	NITTR, Kolkata	28-12-2015 to 01.01.2016 (1 week)	1 week
29	Introduction to Simulation of Mechanical System by using ABAQUS and MATLAB	Mechanical Engineering	Assam Don Bosco University	24.09.2016-25.09.2016	
30	Regional training Workshop on NAD	Gauhati University Guwahati	University Grant Commission	30.09.2016	
31	National Cyber Defence Summit 2016	Anna University Chennai	Anna University Chennai	30.09.2016-1.10.2016	
32	Administrative and Financial administration of University	National Law University Assam	National Law University Assam	26.11.2016	
33	Cross cultural analysis and capacity building in construction management practices in housing and	Assam Engineering College	University of Melbourne and Assam Engineering	13-12-2016 To 16-12-2016	1 week

	infrastructure sectors of Assam and Australia		College		
34	Quality and Quality control	Assam Engi9neering College	FDP AICTE	18-1-24 to 24-1-2024	1 week
35	Recent advances of 3D printing and its Bio Medical Engineering Application	Royal Global University	HRD, Govt of India	12.10.2020 to 16.10.2020	1 week

Research Interest: Aerodynamics, Wind Engineering, Computational Fluid Dynamics, Mechanical Vibration, Solid waste management