**Personal Profile**

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| C:\Users\Rahman\Desktop\Mathematics_Saifur_MTH7200001\photo.jpg |  | **Dr. Saifur Rahman** |
| **Associate Professor, Department of Mathematics** |
| **Rajiv Gandhi University, Rono Hills, Doimukh** |
| **Arunachal Pradesh-791112** |
|  |
| **Email:** | **saifur.rahman@rgu.ac.in** |
|  | **saifur.ms@gmail.com** |
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| **Phone No.:**  | **+91 7308145302** |

**Educational Profile**

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| Ph. D. | Gauhati University, Guwahati, Assam; 2012Supervisor: Prof. Helen K. Saikia |
| M. Tech.M. Sc. | Tezpur University, Tezpur, Assam; 2008Pure Mathematics, Gauhati University, Guwahati, Assam; 2005 |
| B. Sc. | Gauhati University, Guwahati, Assam; 2003 |

**Professional Experience**

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| **Associate Professor**, Department of Mathematics,Rajiv Gandhi University, Arunachal Pradesh, India | August, 2020-till date |
| **Assistant Professor**, Department of Mathematics,Rajiv Gandhi University, Arunachal Pradesh, India | August, 2008- August, 2020 |
| **Assistant Professor**, Department of Mathematics, Arya Vidyapeeth College, Assam, India | May, 2008- August 2008 |

**Awards & Honours**

1. Qualified GATE in 2007.
2. Qualified CSIR-UGC-NET JRF in December, 2006

**Membership of Professional Bodies**

1. Life Member of Assam Academy of Mathematics, Assam, India
2. Member of European Association of Geoscientist and Engineers, USA (2007-2015)

**Research Interests**

* Fuzzy Sets and Logics with application in algebraic structures and decision making
* Defining structures on graphs and hypergraphs; and their applications
* Semirings and Semimodules with their applications

**Research Publications**

1. A note on digital sequence hypergraphs and 2-graph congruence arithmetic: Chowdhury, M.; Rahman, S.; *South East Asian Journal of Mathematics and Mathematical Sciences;* ***2021;* 17 (2),** 319-336.
2. Application of graph semirings in decision networks: Umbrey, G.; Rahman, S.; *Mathematical Forum,* **2020**, *28,* 40-51*.*
3. Determining paths energy of a complex network: Umbrey, G.; Rahman, S.; *Advances in Mathematics: Scientific Journal;* **2020**, 9(10), 8761–8770.
4. Interval neutrosophic hesitant fuzzy Einstein Choquet integral operator for multicriteria decision making: Kakati, P.; Borkotokey, S.; Rahman, S.;  Davvaz, B.; *Artificial Intelligence Review;* **2020, 53,** 2171-2206.
5. On colourability of hypergraphs; Chowdhury, M.; Rahman, S.; *Advances in Mathematics: Scientific Journal;* **2020**, 9(10), 8047–8068.
6. Hypergraph near-ring groups with a.c.c. on annihilators; Chowdhury, K. C.; Chowdhury, M.; Rahman, S.; *Advances in Mathematics: Scientific Journal;* **2020**, 9(9), 7293–7320.
7. On bipolar fuzzy subsemimodules with respects to bipolar fuzzyconnectives: Ahmed, A. U.; Rahman, S.; Firos, A.; *Journal of Advanced Research in Dynamical and Control Systems;* **2020**, 12 (special issue 2), 14-23.
8. An approach towards rank and nullity of algebraic expressions of graphs: Ahmed, A. U.; Rahman, S.; Firos, A.; *Journal of Advanced Research in Dynamical and Control Systems;* **2020**, 12 (special issue 2), 35-45.
9. On intuitionistic fuzzy automata based on semirings with respect to t-norm: Ahmed, A. U.; Rahman, S.; Davvaz, B.; *Journal of Advanced Research in Dynamical and Control Systems;* **2019**, 11 (special issue 2), 1940-1952.
10. Interval neutrosophic hesitant fuzzy choquet integral in multicriteria decision making: Kakati, P.; Borkotokey, S.; Rahman, S.; Mesiar, R.; Journal of Intelligent and Fuzzy Systems*;* **2018, 35,** 3213–3231.
11. On intuitionistic fuzzy idempotent, prime, strongly irreducible and t-pure ideals of semirings: Rahman, S.; Ahmed, A. U.; Davvaz, B.; Journal of Intelligent and Fuzzy Systems*;* **2017, 33(1),** 433-443.
12. On intuitionistic fuzzy ideals of semirings with respects to fuzzy connectives: :Rahman, S.; Ahmed, A. U.; ***CiiT International Journal of Fuzzy Systems***; **2017, 9(8),** 160-166.
13. On cuts of Atanassov’s intuitionistic fuzzy sets with respect to fuzzy connectives: Rahman, S.; *Information Sciences;* **2016, 340,** 262-278.
14. Fuzzy hollow submodules: Rahman, S.; *Annals of Fuzzy Mathematics and Informatics;* **2016, 12,** 5601-5608.
15. Atanassov’s intuitionistic fuzzy submodules with respect to a t-norm: Rahman, S.; Saikia, H. K.; *Soft Computing;* **2013, 17,** 1253–1262.
16. On the definition of Atanassov's intuitionistic fuzzy subrings and Ideals: Rahman, S.; Saikia, H. K.; Davvaz, B.; *Bulletin of Malaysian Mathematical Sciences Society;* **2013, 36(2),** 401–418.
17. On the definition of intuitionistic fuzzy h-ideals of hemirings: Rahman, S.; Saikia, H. K.; *Kyungpook Mathematical Journal;* **2013, 53(3),** 435-457.
18. (α,β)-fuzzy submodules with respect to a t-norm: Rahman, S.; Saikia, H. K.; The Journal of Fuzzy Mathematics*;* **2013, 21(4),** 859-872.
19. Some aspects of Atanassov’s intuitionistic fuzzy submodule: Rahman, S.; Saikia, H. K.; *International Journal of Pure and Applied Mathematics;* **2012, 77(3),** 369-383.
20. Fuzzy small submodule and Jacobson L-radica: Rahman, S.; Saikia, H. K.; *International Journal of Mathematics and Mathematical Sciences;* **2011,** DOI: 10.1155/2011/980320.

**Book/Book Chapter published**

1. Kakati, P. and Rahman, S.: Decision making model for medical diagnosis based on some new interval neutrosophic hamacher power Choquet integral operators, in  Big data analytics: applications in business and marketingEds. Chowdhury, K.; & Alam, M., Taylor and Francis, to be appeared in 2022.
2. Ahmed, A. U.; Rahman, S.: Some aspects of intuitionistic fuzzy ideals of fully idempotent and weakly regular semirings, in Rahman, S.: Recent Trends of Mathematics, EBH, India, 2017
3. Rahman, S.: Recent Trends of Mathematics, EBH, India, 2017
4. Rahman, S.; Saikia, H. K.: Some aspects of fuzzy algebraic structures*,* Scholars’ Press, Germany, 2013.

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**Research guidance**

**Ph.D scholar**

1. Maitrayee Chowdhury

Topic of research: A study of graphs and hypergraphs with special reference to number theory hyper operational algebraic implications and elliptic curve cryptography

Year of PhD degree: Ongoing

1. Gete Umbrey

Title of the thesis: A study of Semirings: Some theoretical prospects and approaches towards decision-making

Year of PhD degree: 2021

Present occupation: Assistant Professor, JNC, Pasighat, Arunachal Pradesh

1. Apil Uddin Ahmed

Title of the thesis: Some aspects and applications of Semirings and semimodules: A study in fuzzy setting

Year of PhD degree: 2020

Present occupation: Assistant Professor, Kaziranga University.

**Course/Conference/Workshop organized**

1. STTP on Big data analytics using soft computing tools by Department of CSE, Rajiv Gandhi University, Arunachal Pradesh, India

Duration: **27th September 2021 to 2nd October 2021.**

Role: Convener

1. Webnar on Machine learning and Deep learning using MATLAB by Department of Mathematics, Rajiv Gandhi University, Arunachal Pradesh, India

Duration: **19th June 2020**

Role: Coordinator.

1. National conference on Mathematical Sciences & Applications in Science, Engineering & Technology (MSASET-19) by Department of Mathematics, Rajiv Gandhi University, Arunachal Pradesh, India

Duration: **25th March 2019 to 26th March 2019.**

Role: Organizing Secretary

1. Workshopin **On Elementary Mathematics for School Teachers, November 3-5, 2016 (WEMST-16)** by Department of Mathematics, Rajiv Gandhi University, Arunachal Pradesh, India

Duration: **3rd November 2016 to 5th November 2016.**

Role: Organizing Secretary

1. 2nd National on Conference on Second National Conference on Recent Trends of Mathematics and its Applications, by Department of Mathematics, Rajiv Gandhi University, Arunachal Pradesh, India

Duration: **6th November 2015 to 7th November 2015.**

Role: Organizing Secretary

1. One Day Memorial Lectures On Industrial and Financial Mathematics In Memory of Great Indian Mathematician Srinivasa Ramanujan, by Department of Mathematics, Rajiv Gandhi University, Arunachal Pradesh, India

Duration: **22nd Decemebr 2015**

Role: Organizing Secretary

1. National Conference on Recent Trends of Mathematics and its Applications, by Department of Mathematics, Rajiv Gandhi University, Arunachal Pradesh, India

Duration: **25th April 2014 to 26th April 2014**

Role: Organizing Secretary

**Course/Conference/Workshop etc. attended**

1. Delivered an oral presentation in ‘1st International Conference International Conference On Advances in Mathematics, Science and Technology (ICAMST-2020)’, an International Conference held at Department of Mathematics, Rajiv Gandhi University, Doimukh, India during 1-3 September 2020.

Title of the presentation: Deterministic Finite Automata over Semimodules

1. Delivered an oral invited talk in ‘National Webinar’, held at Department of Mathematics, Arya Vidyapeeth College, Guwahati, India on 16.07.2020.

Title of the presentation: Introduction to Groups and tools to learning Abstract Algebra

1. Delivered an oral invited talk in ‘National Webinar’, held at Department of Mathematics, Royal Global University, Guwahati, India, Guwahati, India on 08.06.2020

Title of the presentation: Art of Learning Mathematics: An approach to Abstraction

1. Delivered an oral presentation in ‘International conference on Frontiers in Mathematics’, a national Conference held at Department of Mathematics, Gauhati University, Guwahati, India during 22-23 December 2016.

Title of the presentation: On Cuts of Attanassov’s Fuzzy sets ….connectives.

1. Delivered an oral presentation in ‘International conference on Frontiers in Mathematics’, an International Conference held at Department of Mathematics, Gauhati University, Guwahati, India during 26-28th March, 2015.

Title of the presentation: Cut Sets of Attanassov’s Fuzzy sets ….connectives: t-norms and t-conorms

1. Delivered an oral presentation in ‘2nd International Conference of Rough Sets, Fuzzy Sets and Soft Computing’, an International Conference held at Department of Mathematics, Tripura University, Agartala, India during 17-19th January, 2013

Title of the presentation: Fuzzy Hollow Submodules

1. Delivered an oral presentation in ‘International Conference on Applied Analysis and Algebra’, an International Conference held at Department of Mathematics, Yildiz Technical University, Istanbul, Turkey during 29th June -2nd July 2011

Title of the presentation: $(α, β)$- Fuzzy Submodules with Respect to a T-norm

1. Delivered an oral presentation in ‘National Conference on recent Trends in Mathematics and its applications’, national Conference held at Department of Mathematics, Gauhati University, Guwahati, India during 12-13 September 2009.

Title of the presentation: Anisotrophy…Phases

**Sponsored Project**

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| Title of the project | Funding agency | Year of sanction | Role  |
| Fuzzy Aspects of rings and modules Theory | UGC | **2012** | **PI** |