



#### **Department of Mathematics** School of Sciences Maulana Azad National Urdu University (Central University) Gachibowli, Hyderabad, Telangana-500032, India

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# DR. SUBHASH ALHA | Assistant Professor

CURRENT DESIGNATION/Currently working as an **Assistant Professor** in Department of Mathematics, School INVOLVEMENT of Sciences, Maulana Azad National Urdu University (Central University), Hyderabad, Telangana, India.

AREA OF SPECIALIZATION Special Functions, Fractional Calculus, Quantum Calculus

ONGOING ACADEMIC RESEARCH/PROJECTS

INNOVATION WITH FIELD OF STUDY AND COLLABORATIVE **EFFORTS** 

ACADEMIC AND • 7 YEARS ADMINISTRATIVE EXPERIENCE

EDUCATIONAL QUALIFICATION • DOCTOR OF PHILOSOPHY (Ph.D.), 2016

Department of Mathematics, University of Rajasthan, Jaipur Master of Science (Mathematics), 2009

TEACHING PROFICIENCY

Calculus, Differential Equations, Integral Equations, Complex Analysis, Calculus of Variations, Numerical Methods, OR,

# RESEARCH PUBLICATION 1. On $\psi$ -Hilfer generalized proportional fractional operators

DETAILS Ishfaq Mallah, Idris Ahmed, Ali Akgul, Fahd Jarad, Subhash Alha AIMS Mathematics, Volume 7, Year 2022, Pages 82-103

> 2. New Aspects of Bloch Model Associated with Fractal Fractional Derivatives

Ali Akgül, Ishfaq Ahmad Mallah, Subhash Alha Nonlinear Engineering, Volume 10 (1), Year 2021, Pages 323-342

3. Generalization of Taylor's formula and differential transform method for composite fractional q-derivative

Ramanujan Journal, Volume 48, Year 2019, Pages 21-32

4. On generalized composite fractional q-derivative Mridula Garg, Subhash Alha, Lata Chanchlani

Le Matematiche, Volume 70, Year 2015, Pages 123-134

5. q-Analogues of Saigo fractional integrals and derivatives of generalized basic hypergeometric series

Mridula Garg, Lata Chanchlani, Subhash Alha

Palestine Journal of Mathematics, Volume 4, Year 2015, Pages 144-155

6. On generalized composite fractional derivative

Walailak Journal of Science and Technology, Volume 11, Year 2014, Pages 1069-1076

7. A new class of q-Apostol-Bernoulli polynomials of order  $\alpha$ . Mridula Garg, Subhash Alha

Revista Technocientifica URU, Volume 6, Year 2014, Pages 67-76

8. Some inequalities for product of ratio of q-gamma functions Mridula Garg, Lata Chanchlani, Subhash Alha

Journal of Rajasthan Academy of Physical Sciences, Volume 12, Year 2013, Pages 55-62

9. On generalized q-differential transform

Mridula Garg, Lata Chanchlani, Subhash Alha

Aryabhatta Journal of Mathematics & Informatics, Volume 5, Year 2013, Pages 265-274

### DETAILS OF ATION IN CONFERENCES/WORKSHOPS/SEMINARS

CONFERENCE/SEMINAR 20th International Conference of International Academy of Physical Sciences on /WORKSHOP/FDP Recent Advances in Physical Sciences and Future Challenges, July 14-16, 2017 at (ATTENDED/PRESENTED) Faculty of Science, Osmania University, Hyderabad Presented Paper: Generalization of Taylor's formula and differential transform method for composite fractional *q*-derivative.

One week Short Term Training Programme on Mathematical Modeling, Optimization, Fractional Calculus and their Computations in Engineering and Sciences, June 21-25, 2016, at Sardar Vallabhbhai National Institute of Technology, Surat. **Presented Paper:** On generalized composite fractional derivative.

International Conference on Mathematical Sciences 2014, August 21-23, 2014, School of Mathematics, Madurai Kamraj University, Madurai. **Presented Paper:** On generalized composite fractional q-derivative.

International Conference on Special Function and their Application ICSFA 2013 (12<sup>th</sup> Annual Conference of SSFA) and symposium on Applications in Diverse Fields of Engineering and Technology, December 13-15, 2013 at Department of Mathematics and Mechanical Engineering, Malviya National Institute of Technology, Jaipur. **Presented Paper**: A new class of q-Apostol-Bernoulli polynomials of order  $\alpha$ .

24th National conference of Rajasthan Ganita Parishad on Modern aspects & challenges in Mathematics, May 18-19, 2013 at Department of Mathematics, M.A.J. Govt. College, Deeg (Bharatpur) Raj. **Presented Paper**: A new class of Apostol-Bernoulli polynomials of order  $\alpha$ .

 $2^{nd}$  National Conference on computational and Mathematical Sciences COMPUTATIA-II, November 30 & December 1, 2012 at VIT Campus, Jaipur. **Presented Paper**: "On generalized q-differential transform."

National Conference on Recent Trends in Mathematics and Silver Jubilee Function of

Rajasthan Ganita Parishad, May 27, 2012 at Department of Mathematics, M. S. J. Govt. College, Bharatpur. **Presented paper**: "Some inequalities for product of ratio of q-gamma function"

#### **ATTENDED**

# CONFERENCES/STTP/FDP/WORKSHOPS/SEMINARS

Conference on Fractional Calculus: Analysis & Applications organized by Department of Mathematics, Savitribai Phule Pune University, Pune during 20 to 21 August, 2021.

International GeoGebra Conference, India, Online, 11-13 March, 2021.

National Webinar on HIV Infection and its Remedial Drug Therapy- A Mathematical Study, 20th Feb. 2021.

International Conference on Special Functions and Applications (ICSFA 2020) organised by Department of Mathematics & Computer Science, Babu Banarasi Das University, Lucknow during 22 to 23 December, 2020.

86th Annual Conference of Indian Mathematical Society (IMS 2020) organized by Department of Mathematics, School of Advanced Sciences, Vellore Institute of Technology, Vellore during 17 to 20 December, 2020.

International Webinar on Special Functions and Discrete Mathematics organized by Department of Mathematics, University of Kerala from  $2^{nd} - 5^{th}$  Aug., 2020.

FDP on Research Methodology: Tools & Techniques organized by IILM College of Engineering & Technology from  $18^{th}$  –  $22^{nd}$  May, 2020.

One week National FDP through online mode on LATEX and SciLab organized by Department of Mathematics, University of Rajasthan, Jaipur from 9th – 15th June, 2020.

FDP on Examination Reforms organized by NIT Mizoram from  $15^{\text{th}}$  - $19^{\text{th}}$  February, 2021.

FDP on Data Analytics Techniques for Research and Innovation and their Advancements, organized by VIT Jaipur from 29th Aug. 2nd Sept., 2020

#### **NUSC 2020**

International Conference on Special Functions & Applications (ICSFA - 2019) & Symposium on Application of Mathematical Sciences in Engineering Problems, October 21–23, 2019, Department of Mathematics, University College of Engineering and Technology (A Constituent College of Bikaner Technical University), Bikaner, Rajasthan.

National Urdu Science Congress 2019,  $28^{th}$  Feb., -  $1^{st}$  March, 2019 at MANUU, Hyderabad.

Three days Workshop on Online Teaching, Learning and Assessment with Open Educational Resources, Educational Technology Tools & MOOC Platform Programme

Production, organized by IMC, MANUU from Nov. 27-29, 2017.

Short Term Course for Training Programme on Academic Leadership, at HRDC MANUU, from May 01-06, 2017.

STTP on Research Tools in Pure and Applied Mathematical Sciences, June 14-20, 2015, JK Lakshmipat University, Jaipur.

17th International Conference of International Academy of Physical Sciences (CONIPAS-XVII) on Emerging Trends in Physical Sciences & Technology, January 16-18, 2015, University of Rajashan, Jaipur, Rajasthan.

National Seminar on Recent Advances in Applied Mathematics and 18th Prof. P.D. Verma Memorial Lecture-2014, September 13-14, 2013 at Department of Mathematics, University of Rajasthan, Jaipur, Rajasthan.

National Seminar on Recent Developments in Applied Mathematics and  $17^{\text{th}}$  Prof. P.D. Verma Memorial Lecture-2013, September 14, 2013 at Department of Mathematics, University of Rajasthan, Jaipur.

National Workshop on Computational Methods in Engineering and Mathematics using MATLAB and MATHEMATICA, April 19-20, 2013 at Department of Mathematics, Marudhar Engineering College, Bikaner.

Workshop on Emerging Trends in Ramanujan's Mathematics and its application in the Field of q-Hypergeometric Series, December 22-24, 2012 at National Academy of Sciences, India, Allahabad.

National Workshop on Recent Trends in Bio-Mathematics and Statistics, November 2-5, 2012 at Centre for Mathematical Sciences, Banasthali University, Banasthali.

National Workshop on Research Methodology-2012, October 19-21, 2012 at Department of Statistics, University of Rajasthan, Jaipur.

UGC Sponsored-National Seminar on Recent Advances in Applied Mathematics and 16<sup>th</sup> Prof. P.D. Verma Memorial Lecture-2012 (NSRAM and PDVML-2012), July 29, 2012 at Department of Mathematics, University of Rajasthan, Jaipur.

AICTE Sponsored National Conference on "Recent Advances in Mathematics with Applications in Engineering", NCRAMAE-2012, March 12-13, 2012 at Government Engineering College, Ajmer.

National Seminar on Advances in Complex Analysis and Special Functions (ACASF 2011), March 12-13, 2011 at Department of Mathematics, Central University of Rajasthan, Kishangarh, Ajmer.

Soft Skills Faculty Development Workshop, August 20-21, 2010 at Jaipur Engineering College, Kukas, Jaipur.

21st National Conference of Rajasthan Ganita Parishad on Recent Trends in Mathematics and Actuarial Sciences, February 20-21, 2010, at Malviya National

# DETAILS OF KEYNOTE SPEAKER/RESOURCE PERSON/ SESSION CHAIR ETC.

- Applications of Partial Differential Equations and GeoGebra,
   17th November, 2021 (Online on MS Team), Amity
   University, Noida, UP
- Applications of GeoGebra, Three Days National Workshop on "Introduction and Applications of Geogebra and R" held at Jaipur Engineering College, Jaipur during September 28-30.2021.
- "GeoGebra as Technological Tool in Mathematics" in Three Days Online Faculty Development Program on "Recent Developments in Mathematics and Their Applications" from 12<sup>th</sup> -14<sup>th</sup> August, 2021 organized by Jaipur Engineering College, Jaipur.
- "Overview of GeoGebra and visualization of Differential equations with GeoGebra" on 3<sup>rd</sup> April, 2021 (Online), Amity University, Noida, UP

#### ACHIVEMENTS 1.

# DETAILS OF SUPERVISION (M.PHIL/M.TECH/P.HD.)

## PROFESSIONAL MEMBERSHIPS

- Life member, Indian Mathematical Society (IMS), Membership No. L/2020/74
- Life member, Indian Science Congress Association (ISCA), Membership No. L37013.
- Life member, Society for Special Functions and their Applications (SSFA).
- Life member, Rajasthan Ganita Parishad (RGP).

PERSONAL DETAILS

**Father's Name** : Hanuman Prasad **Date of Birth** : 02<sup>nd</sup> June, 1984

Gender : Male
Marital Status : Married
Nationality : Indian

Language : Urdu, Hindi, English

Known

Date: 31/01/2022 Place: Hyderabad

(Dr. Subhash Alha)