#### Fatimah Abdulrahman Alrawajeh

Assistant Professors
Ph.D/Numerical Analysis
Department Of Mathematics
College of Science
Imam Abdulrahman Bin Faisal University (IAU)
P. O. Box 1982, Dammam31441, Saudi Arabia.

#### Personal Data

Nationality | Saudi

Official IAU Email | falrawjih@iau.edu.sa

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## Language Proficiency

| Language | Read | Write | Speak |
|----------|------|-------|-------|
| Arabic   | ✓    | ✓     | ✓     |
| English  | ✓    | ✓     | ✓     |
| Others   |      |       |       |

## Academic Qualifications (Beginning with the most recent)

| Date | Academic Degree | Place of Issue     | Address  |
|------|-----------------|--------------------|--|
| 2010 | Ph.D            | Dammam university  | P. O. Box 1982,<br>Dammam31441, Saudi<br>Arabia. |
| 2003 | Master          | Science<br>college | P. O. Box 1982,<br>Dammam31441, Saudi<br>Arabia. |
| 1997 | Bachelor        | Science<br>college | P. O. Box 1982,<br>Dammam31441, Saudi<br>Arabia. |

## PhD, Master or Fellowship Research Title: (Academic Honors or Distinctions)

| PhD        | Symbolic and Numerical methods for some regular and singular Fredholm linear integral equations |
|------------|---|
| Master     | Numerical methods for the inverse of the Laplace transform.                                     |
| Fellowship |   |

Professional Record: (Beginning with the most recent)

| Job Rank              |              | Place and Address of Work |  |      |
|-----------------------|--------------|---------------------------|--|------|
| Ass. Prof.            | Math.<br>Dep | Dammam<br>university      | P. O. Box 1982,<br>Dammam31441, Saudi<br>Arabia. | 2010 |
| Lecturer              | Math.<br>Dep | Science college           | P. O. Box 1982,<br>Dammam31441, Saudi<br>Arabia. | 2003 |
| Teaching<br>Assistant | Math.<br>Dep | Science college           | P. O. Box 1982,<br>Dammam31441, Saudi<br>Arabia. | 1997 |

## Administrative Positions Held: (Beginning with the most recent)

| <b>Administrative Position</b> | Office                      | Date          |
|--------------------------------|-----------------------------|---------------|
| Dean of Applied college        | Applied college             | 2021- Present |
| Vice dean of student affair    | Dean ship of student affair | 2018-2021     |
| Vice dean of community         | Community college           | 2017-2018     |
| college                        |                             |               |

## Scientific Achievements

## **Published Refereed Scientific Researches**

(In Chronological Order Beginning with the Most Recent)

|   | Name of Investigator(s)  | Research Title   | Publisher and Date of<br>Publication                      |
|---|--|--|---|
| 1 | Abdulaziz Al-Shuaibi<br>Fatima A Alrawjih                            | Jacobi polynomials used to approximately invert the Laplace transform  | ARABIAN JOURNAL FOR<br>SCIENCE AND<br>ENGINEERING<br>2005 |
| 2 | Abdulaziz Al-Shuaibi<br>Fatima A Alrawjih                            | Jacobi polynomials used to invert the laplace transform  | Analysis in Theory and Applications 2004                  |
| 3 | M. A. Sharaf<br>and<br>F. A. Alrawjih                                | Computational Algorithm for the Exponential Integral   | Al-Azhar Bultien Science<br>2015                          |
| 4 | M. A. Sharaf<br>and<br>F. A. Alrawjih                                | Evaluation of the Elliptic Integrals   | Al-Azhar Bultien Science<br>2015                          |
| 5 | M. A. Sharaf<br>and<br>F. A. Alrawjih                                | First-order perturbed<br>eigenvalue problems in a<br>uniform expansion for<br>Fredholm integral<br>equations | Far East Journal of Applied Mathematics 2013              |
| 6 | Zeyad Al-Zhour, Fatimah<br>Al Rawajeh , Nouf AL-<br>Mutairi and Raed | New Results On The<br>Conformable Fractional<br>Sumudu Transform:  | International Journal of<br>Analysis and Applications     |

|    | AlKhasawneh  | Theories And Applications  | Volume 17, Number 6 (2019), 1019-1033  |
|----|--|--|--|
| 7  | Nahla El_Haggar, Nesrine<br>Mezhoudi, Fatimah<br>Alrawjih  | The Impact of Co-<br>curricular Activities<br>Supported by Generic<br>Skills on Students'<br>Performance at<br>University Level                      | International Journal of<br>Innovative Technology and<br>Exploring Engineering<br>(IJITEE) ISSN: 2278-3075,<br>Volume-8 Issue-12,<br>October, 2019                     |
| 8  | Zeyad Al-Zhour, Fatimah<br>Al Rawajeh , Nouf AL-<br>Mutairi and Raed<br>AlKhasawneh  | Series solutions for the<br>Laguerre and Lane-<br>Emden fractional<br>differential equations in<br>the sense of conformable<br>fractional derivative | Alexandria Engineering<br>Journal<br>2019  |
| 9  | Zeyad Al-Zhour, Fatimah<br>Al Rawajeh, Nouf AL-<br>Mutairi and Raed<br>AlKhasawneh   | Engineering Physics and<br>Mathematics New<br>theoretical results and<br>applications on<br>conformable fractional<br>Natural transform              | Ain Shams Engineering<br>Journal<br>August 2020  |
| 10 | Saqib Nazeer, Muhammad<br>Hussain, Fatimah<br>Abdulrahman<br>Alrawajeh and Sultan<br>Almotairi   | Metric Dimension on<br>Path-Related Graphs   | Saqib Nazeer, Muhammad<br>Hussain, Fatimah<br>Abdulrahman<br>Alrawajeh and Sultan<br>Almotairi   |
| 11 | Muhammad<br>Mubashar,Muhammad<br>Hussain, Fatimah<br>Abdulrahman<br>Alrawajeh, and Sultan<br>Almotairi   | Study of Generalized<br>Hourglass Section in<br>Carbon Nanocone via<br>Connection Number   | Muhammad<br>Mubashar,Muhammad<br>Hussain, Fatimah<br>Abdulrahman<br>Alrawajeh, and Sultan<br>Almotairi   |
| 12 | Fatimah Abdulrahman<br>Alrawajeh1, F. M.<br>Allehiany2, Ali Raza3,*,<br>Shaimaa A. M.<br>Abdelmohsen4, Tahir<br>Nawaz Cheema5,<br>Muhammad Rafiq6,<br>Muhammad Mohsin7 | Bio-Inspired<br>Computational Methods<br>for the Polio Virus<br>Epidemic Model   | Fatimah Abdulrahman<br>Alrawajeh1, F. M.<br>Allehiany2, Ali Raza3,*,<br>Shaimaa A. M.<br>Abdelmohsen4, Tahir<br>Nawaz Cheema5,<br>Muhammad Rafiq6,<br>Muhammad Mohsin7 |

| #  | Conference Title   | Place and Date of the Conference                                      | Extent of Contribution  |
|----|--|---|-------------------------|
| 1  | The First Scientific Forum: The Role of Women in Community Service                                 | College of Education in<br>Jeddah - 1426                              | Attended                |
| 2  | The First International Conference: E-Learning and Distance Learning                               | Riyadh - National Dialogue<br>Center - 1430                           | Attended                |
| 3  | The first scientific episode:<br>Scientific research: its status,<br>reward, images of its support | Dammam College of Science<br>- 1429                                   | Attended                |
| 4  | The first scientific meeting: the product of the scientific pioneers                               | Dammam College of Science<br>- 1429                                   | Attended                |
| 5  | The first scientific conference for students of higher education                                   | Ministry of Higher Education – 1431                                   | Attended                |
| 6  | First Symposium: Information and Communication Technologies in Education and Training              | King Saud University -<br>Riyadh - 1431                               | Attended                |
| 7  | Gulf Mathematica Conference "An Introduction to Mathematica"                                       | Emirates University - Al Ain<br>- United Arab Emirates -<br>2007      | Attended                |
| 8  | Gulf Mathematica Conference "<br>Introduction to Programming in<br>Mathematica"                    | Emirates University - Al Ain<br>- United Arab Emirates -<br>2007      | Attended                |
| 9  | The Second International Conference: E-Learning and Distance Learning                              | Riyadh - National Dialogue<br>Center - 1432                           | Attended                |
| 10 | E-Learning Week  | University of Dammam - 2010   | Attended                |
| 11 | International Conference on<br>Numerical Analysis and<br>Examples                                  | Dhahran - King Fahd<br>University of Petroleum and<br>Minerals - 2011 | Attended                |
| 12 | first math meeting   | University of Dammam -<br>College of Science                          | Attended                |
| 13 | Preparatory meeting for the third student conference   | University of Dammam  |                         |
| 14 | First European Wolfram Technology conference   | Germany - Radisson Blu<br>hotel - 2013                                | Attended                |
| 15 | International Exhibition and Conference on Higher Education  | Ministry of Higher Education - 2014                                   | Attended                |
| 16 | Preparatory meeting for the sixth student conference   | University of Dammam  | judgement<br>Commission |

| 17 | Practical session (administrative leadership)      | Institute of Management    | trainee |
|----|--|----------------------------|---------|
| 18 | Practical session (job performance management)     | Institute of Management    | trainee |
| 19 | Women's Leadership Forum in Higher Education       | Academic Leadership Center | trainee |
| 20 | KAUST Saudi Leadership<br>Program                  | King Abdullah university   | trainee |
| 21 | ISO 9001 Internal Audit Training Program           | UTV                        | trainee |
| 22 | Collaborative learning centered around the learner | IAU                        | trainee |

## **Supervision of Master and/or PhD Thesis**

| # | Degree Type | Title | Institution | Date |
|---|-------------|-------|-------------|------|
|   | Master      |       |             |      |
|   |             |       |             |      |

# Personal Key Competencies and Skills: (Computer, Information technology, technical, etc.)

Proficiency in a number of software (Mathematica- Matlab)