# **Curriculum Vitae**

of

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> Madina Saudi Arabia

October 2017

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Updated October 2017

# Curriculum Vitae

# Part I: Overall brief information

# 1. Personal Information

Name:	Mohammad Salem Samman		
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Status:	Married with 4 boys and 2 girls		
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# 2. Education

- Ph.D. University of Edinburgh, United Kingdom, 1998. Area of specialization: Pure Mathematics (Algebra). Title of the thesis: "Topics in Seminear-ring Theory".
- M.Sc. King Abdulaziz University, Jeddah, Saudi Arabia, 1992 (MSc. in Mathematics – Algebra). Title of the thesis: "Commutativity Theorems for Rings and Related Topics".
- B.Sc. King Abdulaziz University, Saudi Arabia, 1985 (BSc. in Mathematics).

# 3. Career History

- 1/2017 Now Professor, Department of Mathematics, Taibah University.
- 12/2015 –12/2016 Dean, College of Science Islamic University.
- 11/2014 –12/2015 Academic consultant Islamic University.
- 6/2013 10/2014 Professor, Department of Mathematics, Taibah University.
- 9/2011 6/2013 Dean, College of Science Taibah University.
- 1/2012 2/2012 Acting Chairman, Math Department Taibah University.
- Feb, 2011 –Professor, Department of Mathematics and Statistics, Taibah<br/>University.
- **2009 Feb 2011** Professor, Department of Mathematics and Statics, KFUPM.
- 2005 2009 Associate Professor, Department of Mathematics and Statistics KFUPM
- 1998 2004Assistant Professor, Department of Mathematics and<br/>Statistics, KFUPM
- 9/2006 12/2006 Visiting Scholar, Department of Algebra, Johannes Kepler University, Linz, Austria.
- 7/2003 8/2003 Visiting Scholar, Department of Mathematics and Statistic University of St. Andrews, UK.
- 3/2002 8/2002 Visiting Scholar, Department of Mathematics and Statistic University of Edinburgh, UK.
- **1993 1997** Lecturer, Department of Mathematics and Statistics, KFUPM.
- 1990 1992Joining Dept. of Mathematics, King Abdul-Aziz University,<br/>Jeddah, and obtaining MS in Mathematics.
- 1985 1992Working in the ministry of Education and teaching<br/>Mathematics in a developed high School.

# Part II: Profession & Contribution

# A. Teaching Profile

# 4. Teaching Statement

I started my teaching career in 1985 as a high school teacher in Jeddah, Saudi Arabia. I continued my job while I was doing my MS degree. After my MS I joined KFUPM in 1992 as a university lecturer. After one year lecturer at KUPM I left for UK for my higher studies. I rejoined the department of Mathematics and Statistics at KFUPM in 1998 as an assistant professor. I have taught a variety of Math courses at both Graduate as well as Under graduate level<sup>1</sup>. Teaching from high school level up to university graduate level provided me with vision for teaching and dealing with different types of students. It also helped me a lot in developing myself in many important matters related to the teaching process.

Teaching, in my opinion, is not just to promote learning of the subject matter. It is also meant to help the students learn to think logically, learn problem-solving methods and techniques, and improve writing skills. I prefer the involvement of my students during the course of my class lecture. I view my role as a facilitator in the teaching process. I try at my level best to design the framework in which learning can take place. I always make an effort to stimulate the students' understanding by giving them help in terms of knowledge, techniques, and encouragement.

I usually begin each class with a brief summary of the previous class session, and a reminder of where we left the topic we are currently working on. After this, I briefly outline the new material and list its objectives. My teaching style varies according to the nature of the course.

In the lower level courses, I always subdivide my lecture into various concepts related to the topic. After explaining the concept, I demonstrate its application to an appropriate exercise of the text. I usually break the solution of an exercise into various steps and seek the input of the students while moving from one step to another. I encourage questions and pause in the lecture to answer them. I always assign practice problems and reading material to my students at the end of each lecture. As much as possible, I try to present course material in analytical, numerical, and geometrical contexts. This approach of course depends on the particular topic. I use geometrical figures and graphs to illustrate different concepts. This helps most of the students develop intuitive understanding of the concepts in the class.

Wherever possible, I use computer for demonstration purposes in many courses. The courses like Linear Algebra and Differential Equations are significantly based on numerical software like MATLAB in my classes. However, I try to balance the use of computer and technology with the cost of lecture timing and subject objective. I use my home page to post supplementary materials and solutions for exams and quizzes.

My strategy in the senior and graduate courses is a bit different. Here, I try to motivate the students towards self-learning. The class size at this level is usually small. Therefore, I invite the students to provide a lay out of proof/solution of the result/problem under consideration. With their feedback I present the details of some or all of the necessary steps required for the completion of the proof/solution. The students are encouraged to fill in the gaps left in the argument, if any, by themselves out of the class. This enhances a process of creativity in various topics of the course. I give sufficient weight to homework that consists of course exercises and/or computer based assignment. Whenever possible, I try to assign to the student a project/research paper that is closely related to their course contents.

I keep all the information related to my courses on my Home page and continue on updating it with relevant activities which include solution of quizzes/exams, selective handouts and important announcements.

I encourage my students to discuss their academic problems during my office hours, which I designate four to six times a week. I make myself available at other hours by appointment as well. I try to increase communication with the students as well as get their feedback. I also encourage my students to communicate with me via email. I usually invite the poor performers after the major exams, discuss their hardships or study habits related to the course and provide them advice accordingly

In graduate and senior level courses I try to discuss with each student and give him suggestions/ hints for improvement.

In addition, I have made **some other contributions towards teaching** such as teaching project which deals with students learning process. See also 6 below for more details on contribution towards teaching.

# 5. Courses taught

### Undergraduate Courses & Prep Math

- i. Preparatory Mathematics I
- ii. Preparatory Mathematics II
- iii. Calculus I
- iv. Calculus II
- v. Calculus III
- vi. Elements of Differential Equations
- vii. Introduction to Differential Equations & Linear Algebra
- viii. Finite Mathematics
- ix. Sets and structures
- x. Advanced Calculus (Real analysis)
- xi. Linear Algebra
- xii. Abstract Algebra
- xiii. Advanced Abstract Algebra
- xiv. Graduation Research Projects

### 4.2 Graduate Courses

## A. At King Fahd University of Petroleum & Minerals

- i. Abstract Algebra
- ii. Linear Algebra

### B. At Dammam Girls College

- iii. Ring Theory
- iv. Special topics

C. At Taibah University

- v. Near-ring Theory
- vi. Ring Theory

# 6. Contribution in Developing, Course Coordination and Teaching

### A. At King Fahd University of Petroleum and Minerals

I have been involved in many teaching activities and development process during my period of work at KFUPM. I have been the Chairman of the undergraduate Committee at the Department of Mathematics and Statistics in King Fahd University of Petroleum and Minerals (KFUPM) for more than two years. I was the coordinator for some Math courses such as the course Math 260 (Differential Equations and Linear Algebra) and the course Math 202 (Elements of Differential Equations). I was involved in writing the course description of the Calculus courses at KFUPM and also in evaluating some other courses such as Math 232 (Sets and structures and Math 345 (Abstract Algebra). I contributed in designing the Summer Training course for Math students while I was the chairman of the committee worked on this goal in 2002. Also, I contributed in the coordination of the Preparatory year Math program at KFUPM. My teaching contribution extends to study the learning process for the calculus courses and suggesting some techniques as an outcome of the project work described in 7 below.

### **B.** At Taibah University

While I was working as an acting chairman at the department of Mathematics in Taibah University, I initiated and introduced a new systematic process to arrange and develop the teaching activities including many basic regulations such as course files, course evaluation, course coordination, etc. Also I strongly worked in developing the use of Technology by the students and also by the instructors. For this purpose, I formed a new committee under the name" the use of Technology in Mathematics". Later, being Dean of the college, I chaired the strategic plan committee in the college, working in and, following up all matters related to the college strategic plan.

#### C. At Islamic University

I worked as the supervisor of all scientific programs and academic plans in the college of science at Islamic university while strongly contributed in reviewing and developing the academic plans for all departments: Mathematics, Physics, and Chemistry. In particular, I worked personally on developing the B.S. Mathematics Program in 2015. Also, in a similar direction I designed and supervised the Math course for the Preparatory Year and supervised their exams. Moreover, in the context of Preparatory Year, I colaborated with the

English department in Prep-Year in developing the English Program with respect to scientific terminology. In this regard, I suggested a new basic English course which would help in preparing students for their specialized studies in Engineering, Science, and Computer Science.

Also, I prepared two guide booklets: one for the "Graduation Research Project" course, and the other for "Field Training" course for College of Science students. In this regard, I delivered two talks for all faculty members in the college to introduce the two courses, being newly established in the college, and explain the main goals, the mechanism, and evaluation process of these courses. In another direction, outside the college of science but related to it, I have just started recently to collaborate with the Islamic Economic Department in the Islamic University to design a Math course for their PhD program. Another contribution outside the college is to review the English translation of Titles of all Arabic courses in the Deanship of Graduate Studies. It is worth mentioning that during my period of work, being the dean of college, I tried to recruit many highly qualified instructors and professors for the college of science.

# 7. Teaching Projects

The following table shows a brief summary of teaching projects already done.

Project Title	Funding Agency	Start Date	End Date	Role	Status
Student's Learning Process in Pre- Calculus and Calculus Courses at KFUPM; Identification of Problems and Possible Remedies	DAD King Fahd Univ	1/1/2005	1/1/2006	CI	Done

# 8. Master and Doctoral student Supervision /Examination

# 8.1 M. S. Thesis Supervision / Committee member:

- <u>Supervisor</u>: "A study of special mappings on prime rings", By Nouf A. Al-Yamani, King Faisal University – Girls College, Dammam, (completed in June 2008).
- <u>Committee member</u>: "Reductions and cores of ideals", by Khalid Al-Hazmy, KFUPM, Dhahran, June, 2008.

# 8.2 Ph. D. Dissertations Examined:

- "A study on ideals and maps on BCK-algebras and BCI-algebras and related topics", by Noura Al Shehri, Girls College, Jeddah, Math, 2007.
- "A study on ideals and Filters on Fuzzy BCK-algebras and BCI-algebras", by Sahar Najati, KAU, Jeddah, January, 2008.
- "A study on graph structures of near-rings, weak regularity in near-rings, \*-ideals in semirings with involution and BI-ideals in ternary semirings", by B. Elavarasan, Annamalai University, India, November, 2008.
- "Generalization of regularity in semirings and near-rings", by A. Sudha, Annamalai University, India, June, 2010.
- "Hopf Semialgebras", by Nabeela Alsulaiman, University of Dammam, June, 2011.
- "Contributions to Regular Near-ring Theory", by Puligadda Jyothi, Acharya Nagarjuna University, April, 2014.
- "Bipolar Fuzzy Sets Based on Algebraic Structure", by Maha Abdullah Alghamdi, , KAU, Jeddah, May, 2017.

# 8.3 M. S. Dissertations Examined:

- "Some properties of Hilbert algebras", by Majed Omer Al-Baity, KAU, Jeddah, April, 2008.
- "Fuzzy strong and fuzzy obstinate ideals in BCI-algebras", by Khalid Ali Hamdin, KAU, Jeddah, May, 2008.

- "Injectivity and von Neumann regularity", by Dilshad Adel Al-Ghazzawi, Girls College, Jeddah, January, 2009.
- "On the structures of some groups containing *PSL*(2,27) and *PSL*(2,29), by Nouf Al Raddadi, Taibah University, Madina, September 2011.
- "On P-Subgroups of afinite group", by Mashayer Al Sayeedi, Taibah University, Madina, December 2012.
- "Fuzzy k-algebras", by Rania Saeed Al Ghamdi, KAU, Jeddah, May, 2013.
- "Derivations of BCC/BCH-algebras", by Safia Bawazeer, KAU, Jeddah, Feb. 2015.
- "On Rings endowed with some kinds of mappings", by Zakeyah Saeed Alkhamisi, KAU, Jeddah, January 2016.

# **B.** Research Profile

# 9. Research Interests

- Near-rings theory and Seminear-rings.
- > Derivations in Rings (Prime and Semiprime rings) and Near-rings.
- Endomorphism Semigroups.

#### 10. Research Statement

My earlier work (up to 2004) before promotion to associate professor was concerned with ring theory, near-rings and seminear-rings. During my lectureship period, I did some research work on rings and derivations in connection with commutativety of rings. Thereafter, in my PhD program, I studied near-rings and tried to extend and generalize several important ideas from the case of near-rings to that of seminear-rings. After the completion of my PhD program, I continued my research in seminear-rings and explored some new directions in the area. I worked on derivations in rings and nearrings as well. I have also been involved in many funded research projects on semiprime rings which led me to contribute in the development of the subject by involving derivations and related maps. Prior to the period of my promotion to associate professor, I made an effort to broaden my mathematical knowledge by exploring new directions in certain important areas of research such as Commutative Algebra and C\* Algebra in which I am working till now in addition to my work on seminear-rings.

From 2004 and after my promotion to associate professor, I continued working in seminear-rings and near-rings as an important area of my interest. I initiated some ideas and basic concepts for seminear-rings which were known for the case of near-rings. While some fundamental ideas are defined in a way analogous to the case of near-rings, some concepts are not because semigroups are involved rather than groups. In this direction, I was able to extend the notion of d.g. (distributively generated) near-rings first to the notion of d.g. seminear-rings and then develop many related results. As a simple example for structural development, I obtained a condition in which the d.g. seminear-ring must be distributive. Many other structural aspects were developed. Also, I obtained conditions under which the d.g. seminear-ring is faithful. Based on this, I obtained some results about faithfulness and adjoining identities to d.g. seminear-rings. This work appeared in [JP17].

In the same direction but with different approach while studying the class of inverse semigroups, I obtained a connection between the two algebraic structures; inverse semigroups and d.g. seminear-rings. This also, in some way, gave an answer to the faithfulness of a d.g. seminear-ring as mentioned above. Some of this work appeared in [JP22].

Another type of research concerning near-rings which I have been involved in and still I am working on is derivations in prime rings and prime near-rings. There were only a few papers on derivations (or  $\alpha$ -derivations) of near-rings when I published my paper in 2008. In this context I targeted two main aspects of this study: first, I constructed an example of an  $\alpha$ -derivation in prime nearrings. This was a non-trivial example for such concept while I was not able to find any example for this idea in the literature. This, of course, would give a kind of justification for studying such algebraic aspect. Second, I generalized a well known result in the theory of derivation (Posner's theorem) for the composition of derivations of rings to the case of composition of  $\alpha$ -derivations of prime near-rings. This work appeared in [JP20].

In connection with the work on derivations in rings (prime, semiprime) which I have been working in for long time, I also continued my research work with other related maps such as centralizing, commuting and centralizers. I have been involved in two research projects designed for studying these types of maps. As an outcome, many new results were obtained and published in [JP13], [JP15] and [JP19]. Also, I initiated the study of reverse derivations in semiprime rings with my MS student and developed some new directions. These results appeared in [JP16].

Another different area of research I have been considering is commutative algebra. In this area I collaborated with Prof. A. Mimouni from KFUPM to work on the notion of semistar-operations. Although I had some earlier work prior to my last promotion, I was able to continue this type of research through a one year research project that led to some results which were published in Communications in Algebra [JP24]. In this context, we characterized some classes of integral domains with finite number of semistar operations and semistar operations of finite character. For instance, we showed that in an integral domain R, each semistar operation of finite character on R is defined by an overring if and only if each overring of R is an fgv-domain. Also, we studied the relation between the Krull dimension of an integral domain R having a finite number of semistar operations and the cardinality of semistar operations of finite character.

I already had initiated some work in 2005 with Dr. J. Meldrum of Edinburgh University –UK, on endomorphisms semigroups which was published in Algebra Colloquium [JP11]. I continued my work in this area of research till 2007 when I got a chance to spend two months in summer 2007 and also two months in summer 2008 visiting the department of Mathematics at Heriot-Watt University, UK. During my visits I collaborated with Dr. N. Gilbert of Heriot-Watt University on a similar direction. We worked on endomorphisms of Clifford semigroups and we developed new ideas by considering the d.g. seminerar-ring generated by such endomorphisms. In this work we showed that if S is a Clifford semigroup, with underlying semilattice  $\Lambda$ , then the endomorphisms of S generate a Clifford semigroup E(S) whose underlying semilattice is the set of endomorphisms of  $\Lambda$ . This work led to our publication [JP25]. Further work (also in collaboration with Dr. Gilbert) with similar idea but completely different approach has been completed in summer 2009 and was sponsored by the British Council. Here, we considered endomorphism seminear-rings of Brandt semigroups and gave a complete description of the semigroup generated by such endomorphisms. Also, we obtained an important connection between the endomorphism monoid of a Brandt semigroup  $B_n$  and the symmetric group of degree n. This work has been included in a project report submitted to the British Council and to the research committee at KFUPM, while a research paper has been published in Communications in Algebra [JP26].

I have been involved in 12 research projects<sup>2</sup>, some of them were funded by KFUPM, others by Sabic and the British Council. I was the principle investigator in most of these projects. The nature of work in some of these projects was mentioned above. Moreover, I had also been involved as a co-investigator with a colleague in a teaching project which dealt with student's learning process in pre-Calculus and Calculus courses.

<sup>&</sup>lt;sup>2</sup> See Funded Research Projects on page 17

# 11. Research Publications in Refereed Journals

- JP1\* Abujabal, H. A., Khan, M. A., and Samman, M. S., "On commutativity of one-sided s-unital rings", Tamkang Journal of Math (23) 3 (1992) 253-268.
- JP2 Abujabal, H. A., Khan, M. A., Khan, M. S, Samman, M. S., "On Commutativity of rings with constraints on subsets", Czechoslovak Math. Journal, 43(118) (1993), 3, 439-449.
- JP3 Meldrum, J. D. P., and Samman, M, "On free d.g. Seminear-rings", Riv. Math. Univ. Parma (5) 6 (1997), 283-293.
- JP4 Samman, M. S., Chaudhry, M. Anwar, and Thaheem, A. B., "A note On commutativity of automorphisms", Internat. J.Math. & Math. Sci. (21) 1 (1998), 201-204.
- **JP5** Thaheem, A. B. and **Samman, M. S.**, "A note on α-derivations on Semiprime rings", Demonstratio Mathematica, (34) 4 (2001), 783-788.
- JP6 Thaheem, A. B. and Samman, M. S., "Centralizing mappings on semiprime rings, Int. J. Pure Appl. Math. (3)3(2002), 249-254.
- JP7 Mimouni, A. and Samman, M. S., "Semistar operations on valuation domains", Int. Journal of Commutative Rings, 2(3), (2003), 131-141.
- JP8 Samman, M. S. "On decompositions of d.g. seminear-rings", Mathematica Pannonica", 14/1(2003), 129-134.
- **JP9** Samman, M. S. and Thaheem, A. B., "Derivations on semiprime ring", Int. J. of pure and applied Mathematics, 5(4)(2003), 469-477.
- **JP10** Mimouni, A. and **Samman, M. S.**, "On the Cardinality of Semistar operations on integral domains", Communications in Algebra, 33 (2004), 3311-3321.
- JP11 Samman, M., S. and Meldrum, J. D. P., "On Endomorphisms of Semilattices of Groups", Algebra Colloquium, 12(1), (2005), 93-100.
- JP12 Samman, M. S., and Chaudhry M. A," Left centralizers of semiprime rings", International Journal of Pure and Applied Mathematics, 20(4), (2005), 487-495.

<sup>\*</sup> Journal Publication

- JP13 Samman, M. S., "A Note on Reverse Derivations", International Journal of Mathematical Education in Science and Technology, 37(1), (2006), 98-101.
- JP14 Samman, M. S., "On strong commutativity-preserving maps", International Journal of Math and Mathematical Sciences, 6(2005), 917-923.
- JP15 Chaudhry, M. A., and Samman, M. S., "Generalized inverses of semiprime rings", Aequationes Mathematicae, 71(2006), 246-252.
- JP16 Samman, M. S., amd Al-Yamani, Nouf, "Derivations and reverse derivations in semiprime rings", International Mathematical Forum, 39(2), (2007), 1895-1902.
- JP17 Samman, M. S., "On the representation of d.g. seminear-rings", Algebra Colloquium, 14(1) (2007), 79-84.
- JP18 Chaudhry, M. A., and Samman, M. S., "Free actions on semiprime rings", Mathematica Bohemica, 133(2), (2008), 197-208.
- JP19 Samman, M. S., and Chaudhry M. A," Dependent elements of left centralizers of semi-prime rings", AJSE, 33(2A), (2008), 313-319.
- JP20 Samman, M. S., "Centralizers of semiprime rings", Science Journal of King Abdul-Aziz University (2008).
- **JP21** Samman, M. S., "Existence and Posner's Theorem for α-derivations in Prime Near- rings", Acta Mathematica Univ. Comenianae, LXXVIII, 1(2009), 37-42.
- JP22 Samman, M. S., "Inverse semigroups and seminear-rings", Journal of Algebra and its Applications 8(5), (2009), 713-721.
- JP23 Samman, M. S., "Clifford seingroups and seminear-rings of endomorphisms", Indian Journal of Pure and Applied Mathematics, 40(2), (2009), 131-145.
- JP24 Mimouni, A. and Samman, M. S. "Characterization of some classes of integral domains via semistar operations", Communications in Algebra, 38:4, (2010), 1341-1350.
- JP25 Gilbert, N. D. and Samman, M. S., "Seminear-rings of endomorphisms of Clifford semigroups", International Electronic Journal of Algebra, 7(2010), 110-119.

- JP26 Gilbert, N. D. and Samman, M. S., "Endomorphisms of Brandt semigroups", Communications in Algebra, 38(2010), 4028-4041.
- JP27 A. Mamouni, L. Oukhtite and Samman, M. S., Commutativity Theorems for \*-Prime Rings with Differential Identities on Jordan Ideals, ISRN Algebra, accepted (2012).
- JP28 Samman, M. S., L. Oukhtite and A. Boua "A study of near-rings with generalized derivations", JTUSCI, 9 (2015), 407-413.
- **JP29** Samman, M. S., L. Oukhtite, A. Boua and A. Raji, "Two sided α- derivations in 3-prime near-rings", The Rocky Mountain Journal of Mathematics, 46 (4), (2016), 1379-1393.

### 12. Research papers submitted for publication

JP30 Samman, M. S., "Commutativity of near-rings with certain constrains on ideals".

### 13. Other Research Activities

- CP1 Seddigi, Z., et.al., M. Samman, 2003, "Scientific Research at KFUPM: Obstacles and Possible Solutions", Proceedings of the Discussion Forum on Research at KFUPM: Challenges and Opportunities, May 2003, pp. 27-35.
- CP2 Balarabe Yushau, M. Samman and Muhammad Bokhari Students' Learning Process in Pre-Calculus and Calculus: Impact of Poor Retention, Proceedings of the First International Conference on Mathematics and Statistics Sharjah, U.A.E March 2010.

### 14. Books\Booklets

- 1- Research Graduation Projects Guidelines (2016).
- 2- A First Step in Linear Algebra (with Prof. Lehcen Oktite), to appear.

#### 15. Citations

Taking into consideration that in pure mathematics, and in particular algebra, citations do not appear quickly, however I am aware of about 81 citations that are included in the Appendix.

Project Title	Funding	Start	End	Role	Status
Derivations and Related Maps on Semiprime Rings	Sabic	4/2002	4/2003	PI	Done
<sup>2</sup> Endomorphism Semigroups	British Council	7/2003	9/2003	PI	Done
<sup>3</sup> On Centralizers of Semiprime Rings	Sabic	5/2003	11/200 4	PI	Done
<sup>4</sup> Free Actions on Rings	Sabic	9/2004	12/200 5	PI	Done
<sup>5</sup> Endomorphism Semigroups II	British Council	6/2006	8/2006	PI	Done
<ul> <li>Translation for the book : "Algebra"</li> <li>By Thomas W. Hungerford</li> <li>Graduate Texts in Mathematics</li> <li>(GTM), Vol. 73 Springer-Verlag, New York</li> </ul>	KFUPM			CI	Temp Postpond
7 Some development in near-ring theory	KFUPM	9/2006	1/2007	PI	Done
<sup>8</sup> Chracterization of some classes of integral domains via semistar operations	Sabic	9/2006	9/2007	PI	Done
9 Endomorphisms of Brandt semigroups and related topics	British Council	7/2008	9/2008	PI	Done
<sup>10</sup> Some algebraic aspects of seminear-rings and Brandt semigroups	British Council	7/2009	9/2009	PI	Done
A Study on Generalized Derivations in Near-rings	Taibah Univ.	1/2014	1/2015	PI	Done
12 Authoring a book on: Linear Algebra	self	1/2015	2016	PI	In progress

# 16. Funded Research Projects<sup>3</sup>

<sup>&</sup>lt;sup>3</sup> See also Teaching Projects

# 17. Conference/Workshop/Seminar Attendance

#### International Conferences/Workshops:

- > 47th British Mathematical Colloquium, Edinburgh, Scotland, April 1995.
- > Erasmus Intensive Program in Algebra, Edinburgh, 1995.
- The International conference on Near-rings and Near-fields, Hamburg, Germany, 30 July-6 August, 1995.
- > The Edinburgh Mathematical Society, Postgraduate Meeting, May 1997.
- The International conference on Near-rings and Near-fields, Stellenbosch, South Africa, 14-18 July, 1997 (A research paper was presented).
- > Edinburgh Mathematical Society, Meeting, 1998.
- > Algebra Workshop, KFUPM (with all invited speakers from European Institutions, 7-9 November 1999.
- The International conference on Near-rings and Near-fields, Edinburgh, Scotland, 12-16 July, 1999.
- The International conference on Near-rings and Near-fields, Hamburg, Germany, 27 July–3 August, 2003.
- Heriot-Watt Semigroup Day, Heiot-Watt university, Edinburgh, Scotland, 5 July, 2006.
- Geometric Patterns in Islamic Art, Leiden University, Netherlands, 11–15 September, 2006.
- International Workshop on Algebra and Applications, Fez, Morocco, 18 21 June, 2014.

#### Selected local Conferences/Workshops

- The Saudi Association for Mathematical Sciences, 4th Meeting, Riyadh, 1998.
- > Prep-Year Math Instructors Workshop, KFUPM, August 27-29, 2001.

- Workshop on 'Increasing Effectiveness as a University Teacher', KFUPM, September 2002.
- Workshop on 'Research at KFUPM : Challenges and Opportunities', May 2003.
- > Workshop on "MATLAB", Math department, KFUPM, February 17, 2004.
- ▶ Workshop on "Industrial Math", KFUPM, 29/2-3/3/2004.
- > The second Saudi Science Conference", KAAU, Jeddah, 15-17/3/2004.
- ➤ Workshop on "WebCT", DAD, KFUPM, 7-16/2004.
- The Saudi Association for Mathematical Sciences meeting, Prince Sultan University, Riyadh, 7-8/4/2004.
- Workshop "On preparing questions", National Center for assessment, Riyadh, 19-22/4/2004.
- ➤ Workshop on "Faculty Research Development", DAD, KFUPM, 7/2/2005.
- > Algebra and Applications Day, KFUPM, 1/3/2005.
- The Second Educational Scientific Meeting, Ministry of Education, Eastern province, 24-25/5/2005, Al Khobar.
- > Algebra Workshop, Dept. of Math. Sc., KFUPM, 21 March 2006.
- > The third Saudi Science Conference", KSU, Riyadh, 10-13/3/2007.
- The "2nd Conference on Planning & Development of Education and Scientific Research in the Arab States", KFUPM, 24- 27/2/2008.
- ➤ Workshop on "Training for Math Olympiad", KFUPM, 22-24/3/2009.
- ➤ Workshop on "Problem Solving Strategies", KFUPM, 27-30/3/2010.
- The Fifth Saudi Science Conference", Umm Al Qura University, Mekkah, 16-18/4/2012.

#### Seminars (selected attended seminars)

- Algebra weekly Seminars, HeriotWatt & Edinburgh Universities, 1994-1998.
- > Commutative Algebra (Lecture Series), Math Dept., KFUPM, 2003.
- > Math Colloquium, Math Dept., KFUPM (weekly).
- > A Demonstration on "The use of smart classrooms", Math Dept., KFUPM, January 4, 2005.
- Semigroup Day, Heriot-Watt University, July 16, 2007.
- Commutative Algebra (Research Lab seminars), Math Dept., KFUPM, 2007.
- Semigroup Day, Heriot-Watt University, July 16, 2009.
- > The influence of Islamic science on the development of mathematics in Western Europe, Sultan Bin Abdulaziz Science and Technologies Center, Al-Khobar, March 30, 2010.
- Workshop on "Applying Quality Assurance Systems in Learning and Teaching", Movenpick Hotel, Yanbu, 25-26/11/2015.
- Workshop on "Promoting Innovation in Higher Education", By the Academic Leadership Center, Ministry of Education, at Taibah University, Madinah, 14-15/2/2016.

# 18. Presentations/ Seminars (delivered talks)

- > "Topics in Seminear-rings", May 1997, Burn, Dundee, UK.
- "Seminear-rings of Endomorphisms", 15 July 1997, Stellenbosch University, South Africa.
- > "Seminear-rings of Endomorphisms", 2 April 2000, KFUPM.
- ▶ "Semistar Operations", 5 November 2000, KFUPM.
- ▶ "Derivations and Related Maps", 27 May 2003, KFUPM.

- "Why students consider Mathematics as a difficult subject; Observations and Possible Remedies", 25 May 2005, 2nd Scientific meeting, Holiday Inn, Al-Khobar
- "Seminear-ring of endomorphisms; some view and special cases", 21 March 2006, Algebra Workshop, KFUPM.
- "On α-derivations in prime near-rings", 19 September 2006, Dept. of Math. Johannes Kepler University, Linz, Austria.
- \* "Endomorphism seminear-rings of Brandt semigroups", 4 November, 2008, KFUPM.
- Seminear-rings of Endomorphisms of Clifford Semigroups", 22 October 2009, Math Dept., Taibah University, Al-Madina.
- "Mathematics in our life", (public lecture) delivered at Obadah Ibn Al Samit School – Madina, April 2013.
- Students Graduation Projects: An Overview and how should it be", 4 February 2014, College of Science, Taibah University.
- \* "On Seminear-ring of endomorphisms of Clifford Semigroups", 20 June 2014 in "The International Workshop on Algebra and Applications", Fez, Morocco, 19 June, 2014 (Keynote speaker).
- "Field Training for College of Science Students: its importance, mechanism, and evaluation", 21 March 2015.

# 19. Editorial work

- Editor for the "Journal of Taibah University for Science since 2012".
- **Reviewed articles** for some Math journals including the following:
- (a) International Journal of Mathematics and Mathematical Sciences.
- (b) Science Journal of King Abdul-Aziz University.
- (c) Indian Journal of Pure and Applied Mathematics.
- **Reviewed Projects/Research Proposals and related professions** for the following:
  - Inside the Kingdom:
- (a) Research Center King Abdulaziz University, Jeddah, Saudi Arabia.
- (b) Girls College, Dammam, Saudi Arabia.
- (c) Girls College, Jeddah, Saudi Arabia.
- (d) Deanship of Scientific Research, Taibah University, Madina.
- (e) Deanship of Scientific Research, Hayel University.
- (f) Deanship of Scientific Research, Qaseem University.

## • **Outside** the Kingdom:

- (g) Annamalai University, India.
- (h) Sultan Qaboos University, Oman.
- (i) Baghdad University, Iraq.

# 20. Research Visits

	Department	Institution	Host	Duration	Sponsor
1	Dept. of Mathematics and Statistics	University of Edinburgh, UK	Dr. J.Meldrum	6 months 2002	KFUPM
2	Dept. of Mathematics and Statistics	University of St. Andrews, UK	Dr. N. Rusku	7 weeks 2003	British Council
3	School of Mathematics	University of Edinburgh & Heriot Watt University, UK	Dr. Laim O'Carroll	2 months 2006	British Council
4	Dept. of Algebra	Johannes Kepler University, Austria	Prof Gunter Pilz	3 months 2006	KFUPM
5	School of Mathematics	Heriot Watt University, UK	Prof. N. Gilbert	2 months 2007	British Council
6	School of Mathematics	Heriot Watt University, UK	Prof. N. Gilbert	2 months 2008	British Council
7	School of Mathematics	Heriot Watt University, UK	Prof. N. Gilbert	2 months 2010	British Council

The Table below, summarizes the information about all research visits:

# C. Services/Committee Work

21. Committee Work

(at KFUPM, Taibah University, and at Islamic University)

#### University Committees a) <u>At KFUPM (King Fahd University of Petroleum & Minerals)</u>

ΑΑΑΑΑΑ	Standing Committees Bids Opening Committee Students Affairs Committee Housing Committee Mathematical Thinking (Pre-Ram) Faculty Affairs Committee University Text Book Committee	Member Member Member Member Member	1998-1999 1999-2000 2001-2002 2002-2003 2005-2006 2008-2009
	University ad-hoc Committees		
	An ad-hoc Committee for evaluating and designing Math course for	Member	2006-2007
	Architecture undergrad program An ad-hoc Committee to study and	Chairman	2008-2009
	propose possible ways for	<u>Unairman</u>	2008 2009
	collaboration with the directory of		
	Education in the Eastern Province An ad-hoc committee for faculty	Member	2009-2010
	promotion.	Member	2000 2010
	College Committees		
$\triangleright$	College of Science Newsletter	Member	1998-2000
	Sports Competition College	Member	2001-2002
$\triangleright$	Representative Information and Publicity	Member	2002-2004
$\triangleright$	Coordinator for the Safety Comm.	Member	2001-2003
$\triangleright$	Committee organizing the Open day	Member	2002-2005
	College Grants Committee	<u>Chairman</u>	2004-2005

## Departmental Committees

	Departmental Committees		
$\triangleright$	Undergraduate Committee	Member	1998 - 2000
$\triangleright$	Undergraduate Committee	<u>Chairman</u>	2000-2001
$\triangleright$	Algebra Group	Member	1998-
$\triangleright$	Interviewing Applicants for graduate	Member	1999-2000
	assistant		
$\triangleright$	Interviewing Applicants for graduate	Chairman	2000-2001
	assistant		
$\triangleright$	Planning Committee	Member	2000-2005
$\triangleright$	Math Awareness Committee	<u>Chairman</u>	2002-2005
$\triangleright$	Undergraduate Committee	Chairman	2005-2006
$\triangleright$	Research Committee	Member	2005-2006
$\triangleright$	Scientific Committee for Math	Member	2007-2010
	Olympiad		
$\triangleright$	Coordination Committee	Member	2007-2010
$\triangleright$	Graduate Committee	Member	2007-2009
$\triangleright$	Research Committee	Member	2009-2010
	Ad-hoc Committees		
$\triangleright$	Math Exhibition Committee	Member	1998-1999
$\triangleright$	Committee for Maximizing Math.	Member	1998-1999
	Enrolment		
$\triangleright$	Committee for Revising the BS.	Member	1998-1999
	Program		
	Committee for writing course	Member	1999-2000
	description for Math 101, Math 102		
	and Math 201		
$\triangleright$	Committee for reviewing the booklet	Member	1999-2000
	"Rules and Regulations"		
$\triangleright$	Committee for revising the contents	Member	2000-2001
	of the courses Math 232 and Math		
	345		
$\triangleright$	Committee for preparing brochure	Member	2000-2001
	and booklet for the BS. Program		
$\triangleright$	Committee to study the first draft of	Member	2001-2002
	the new KFUPM faculty handbook		
$\triangleright$	Committee for evaluating applicants	<u>Chairman</u>	2001-2002
	for graduate assistantship		
$\triangleright$	Committee for interviewing an	Member	2001-2002
	applicant for Assistant Professor		
$\triangleright$	Committee to study the Summer	<u>Chairman</u>	2001-2002
	Training Program		
$\triangleright$	College of Science Open day	Member	2002-2003
	Committee		
$\triangleright$	Committee for selecting textbook for	Member	2002-2003
	Math 551; a graduate course.		
	-		

Committee for selecting textbook for Math 555; a graduate course.	Member	2002-2003
Committee for interviewing applicants for secretary positions.	<u>Chairman</u>	2003-2005
College of Science Open day Committee	Member	2003-2004
Committee Committee for "distinguished teaching and advising Awards for 2003-2004".	Member	2003-2004
Committee for selecting textbook for Math 232.	Member	2004-2005
Committee for selecting textbooks for Math 552 and Math 553 (graduate courses)	Member	2004-2005
Committee for writing up undergraduate courses: Math 232, 345, 450, 452 for the BS program assessment.	Member	2004-2005
Committee for preparing the entrance exam for PhD students.	Member	2005-2006
University ad hoc committee to evaluate the course Math 130 for Architecture program and designing	Member	2005-2006
a description for this course. Committee for preparing PhD comprehensive exam.	Member	2007-2008
Committee for evaluating applicants for graduate assistantship.	Member	2008-2009
Committee for selecting textbook for the course Math 202.	Member	2008-2009

# b) At Taibah Univesity

# **Standing Committees**

$\triangleright$	University Academic Committee	Member	2011-2013
$\triangleright$	University Branches Committee	Member	2011-2013
$\triangleright$	Standing Committee for Scientific	Member	2011-2013
	distinguished Research Award		
$\triangleright$	Advisory Committee to the Rector	Vice	2011-2012
		Chairman	
$\geqslant$	University Council	Member	2011-2013
$\triangleright$	Deans Advisory Committee	Member	2012-2013

#### University ad-hoc Committees, College and Departmental Committees

I have been involved in many ad-hoc Committees in the university and many other College and Math department Committees that it would be difficult to list all of them in this context. Just as examples: College of Science Strategic Plan Committee (Chairman), University ad-hoc Committee for planning to combine the College of Applied Science with College of Science - University ad-hoc Committee for finding ways to provide textbooks for the students – College Committee for studying graduate students specific problems in Math department – etc.

#### c) At Islamic Univesity

#### **Standing Committees**

$\triangleright$	University Academic Committee	Member	1/2016- 1/2017
$\triangleright$	Higher Advisory Committee	Member	1/2016- 1/2017
$\triangleright$	University Council	Member	1/2016- 1/2017

#### University ad-hoc Committees, College and Departmental Committees

I have been involved in many ad-hoc Committees in the Islamic university and many other College and Math department Committees that it would be difficult to list all of them in this context. Just as examples: College of Science Strategic Plan Committee (Chairman), Scientific Programs Committee (Chairman), Quality Assurance Committee (Chairman), etc.

# 22. Services/activities outside the university

The following are some examples of services and contributions outside my university:

- ➢ I have been a member of the committee that critically reviewed and moderated the exam questions (RAM1) for The National Center for Assessment, Ministry of Higher Education, Riyadh 2002-2003.
- ➢ I prepared Math questions, related to the above matter, to be included in RAM1 admission exam for The National Center for Assessment, Riyadh, 2003-2005.
- ➢ I had undertaken consultancy with the Research and Educational Studies Unit in the Directorate of Girls Education, Eastern Province (2002).
- ➢ I evaluated the Math part of the Gifted Students Program (girls), organized by the Girls Educational section in Dammam during summer 2004.
- ➢ I collaborated with the Girls college of Science in Dammam in many aspects including supervision of an M.S. Thesis and PhD courses (Special Topics), 2006 (See courses taught and Master and Doctoral supervision).
- > I reviewed some research papers submitted to International Math Journals (see Editorial work).
- > I **reviewed research projects** from universities inside the kingdom and also from Gulf universities.
- > I translated some English Math articles into Arabic; some of which appeared in the KFUPM University Journal.
- > I reviewed the "Proposed Graduate Program for Mathematics" for the department of Mathematics at KAU-Girls College, Jeddah (2008).
- > I **reviewed**/evaluated faculty promotion cases for other universities, locally and internationally.

### 23. Extra Curricular Activities (Sport)

I was a member of Saudi Arabian National Team (Table Tennis) for about 6 years (1978 – 1984), participated in many international events including World Champion- ship, Arab Championship and Gulf Championship.

# Part III: References

	[Inside the Kingdom]		[Outside the Kingdom]
*	Professor Salah Kabbaj	*	Professor Gunter Pilz
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*	Professor Charef Beddani	*	Dr. Laim O'Carroll
*	Department of Mathematics College of Science Taibah University Madina Saudi Arabia <u>chbeddani@gmail.com</u> Professor <b>Jehad Al Jaraden</b> Department of Mathematics	*	Department of Mathematics University of Edinburgh, Kings Buildings Edinburgh EH3 9JZ Edinburgh UK <u>eftm42@staffmail.ed.ac.uk</u> Dr. <b>N. D. Gilbert</b> School of Mathematical and Computer Sciences and the Maxwell Institute for the
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