

Curriculum Vitae

Name: Raad Salih Mahdi Contact Information: Address : College of Oil and Gas Engineering, University of Basrah for Oil and Gas, Iraq. Mobile : +964(0)7813133895 E-mail : raadalzurkani64@yahoo.com

Personal Information:

Citizenship : Iraqi *Place of Birth* : Basrah, Iraq *Date of Birth* : March 11, 1964 *Gender* : Male *Marital Status* : Married

Educational Qualifications:

B.Sc. in Mathematics, University of Basrah, Basrah, Iraq, 1986.
M.Sc. in Mathematics, University of Basrah, Basrah, Iraq, 23/4/1992.
Title of M.Sc. Thesis:

On Pro-C Crossed Modules

Thesis Advisor:

Assistant Professor F. J. Korkes, University of Basrah, Basrah, Iraq. 3. *Ph.D.* in Algebraic Topology, University of Basrah, Basrah, Iraq, 15/11/2006.

Title of Doctoral Thesis:

Product of Hypersolvable Arrangements

Thesis Advisors:

- 1. Professor Michel Jambu, University of Nice, Nice, France.
- 2. Assistance Professor Abd Ali H. Altaai, University of Al-Mustansiriyah, Baghdad, Iraq.

Employment History:

1. Assistant Lecturer, June 6, 1992–February 15, 1998, Department of Mathematics, College of Science, University of Basrah, Basrah, Iraq.

2. *Lecturer*, February 15, 1998– February 19, 2002, Department of Mathematics, College of Science, University of Basrah, Basrah, Iraq.

3. *Assistant Professor*, February 20, 2002–2016, Department of Mathematics, College of Science, University of Basrah, Basrah, Iraq.

4. Professor 2016

Teaching Experience:

1. B.Sc. Courses:

(i) Department of Mathematics, College of Science, University of Basrah, Basrah, Iraq.

(a) Calculus

- (b) Finite Mathematics
- (c) Foundation of Mathematics
- (d) Linear Algebra
- (e) Euclidean and Non-Euclidean Geometry
- (f) Group Theory
- (g) Ring Theory
- (h) Introduction to Real Analysis
- (i) Mathematical Analysis

(j) Topology

(*ii*) College of Agriculture (all departments), University of Basrah, Basrah, Iraq.

(a) Calculus

(iii) Department of Mathematics, College of Education for Pure Sciences, University of Basrah, Basrah, Iraq.

(a) Topology

(iv) Department of Oil and Gas Engineering, Department of Chemical Engineering, College of Oil and Gas Engineering, University of Basrah for Oil and Gas Engineering, Basrah, Iraq.

(a) Calculus

2. M.Sc. Courses:

Department of Mathematics, College of Science, University of Basrah, Basrah, Iraq.

- (a) Algebraic Topology
- (b) Module Theory
- (c) Homological Algebra
- (d) Topological Vector Spaces
- (e) Functional Analysis
- (f) Crossed Modules of Groups
- (g) Topological Groups

Research Interests:

- 1. Algebraic Topology
- 2. Algebra
- 3. Topological Algebra
- 4. Homological Algebra

M.Sc. Students:

1. Maher J. Aboud

Thesis Title: On Fuzzy Topology.

2. Mubarak M. Kamil

Thesis Title: Crossed Module of Complexes.

3. Ihssan I. Fadhel

Thesis Title: Some Adjoint Pairs of Coveriant Functors in the Categories of Cat¹- Complexes and Crossed Modules of Complexes

4. Shaimaa A. Abdullah

Thesis Title: Category of Profinite Crossed Modules and Some Adjoint Pairs of Covariant Functors.

5.Saba H. Kassim

Thesis Tittle: Adjunctions between Peiffer Crossed Modules and Crossed Modules and between Commutator Cat¹-groups and Cat¹-groups.

Conferences, Symposia, workshops and training attended:

1. Training for a certificate of French Language course, December 1, 2004- March 1, 2005, France.

2. Research Training in the University of Nice, France, March 1, 2005-July 15, 2005.

3. The extended specialized scientific symposium to update mathematics curriculum in the Iraqi universities, College of Computer Science and Mathematics, University of Al Qadisiya, Iraq, 2009.

4. 1_{st} International conference of Mathematics and its Applications, College of Education for Pure Sciences, University of Basrah, 2011.

5. Workshop to update Computer curriculum, College of Mathematics and Computer Science, University of Kufa, Iraq, 2011.

6. Workshop to update mathematics curriculum in Iraqi universities, College of Computer Science and Mathematics, University of Al Qadisiya, Iraq, 2011

7. 4_{th} International scientific conference; Mathematics, College of Education for Pure Sciences, University of Thiqar, 2013.

8. 2_{ed} International conference of Mathematics and its Applications, College of Science, University of Basrah, 2013.

9. Workshop, Lecturer: On Modular System, College of Oil and Gas Engineering, Basrah University for Oil and Gas, 2019.

10. Workshop, Lecturer: Proposed procedures for registering students in the modular system, College of Oil and Gas Engineering, Basrah University for Oil and Gas, 2019.

Other Scientific Activities:

1. Chairman of many examination committees for the M.Sc. thesis.

2. Chairman of the Graduate Studies Committee in Mathematics Department, College of Science, from 2011-2014.

3. Chairman of some scientific sessions at scientific conferences.

4. Member of the Commission for the curriculum development in Iraqi universities.

Published:

(1) F. J. Korkes and R. S. Mahdi, *The universal property to continuous morphisms of Pro-C crossed modules*, Basrah journal of Science A13(1), 1995, 71-82.

(2) F. J. Korkes and R. S. Mahdi, *Free and Projective Pro-C Crossed Modules and the second homology group of a Pro-C group*, Basrah journal of Science A16(1), 1998, 123-130.

(3) R. S. Mahdi, *On the Pro-C Extensions*, Basrah journal of Science, A (2), 1998, 73-78.

(4) R. S. Mahdi, *Pull-Back in the category of a Pro-C Groups and the universal property of continuous morphism of Pro-C Extensions*, Basrah journal of Science, A17 (1), 1999, 107-78.

(5) R. S. Mahdi and H. M. Ali, *On the Pro-C bicrossed Modules*, Journal of Basrah Researchers. Vol. 28, Part 3, 2002, 44-55,

(6) R. S. Mahdi and I. A. Fadhel, *Construction of a Crossed Module of Complexes from a Precrossed Module of Complexes and a Cat¹-Complex from a preCat¹-Complex.* International journal of Algebra, vol.5, no. 30, 2011, 1459-1468.

(7) R.S. Mahdi and I. A. Fadhel, *Equivalence between the Category of Cat¹-complexes and the Category of Crossed Modules of complexes*, International Mathematical forum, vol.7, no.2, 2012, 97-107.

(8) R.S. Mahdi and M. M. Kamil, *Crossed Modules of Complexes*, Fourth Scientific conference of College of Education for Pure Sciences, Univ. of Thiqar (accepted for publishing) 2013.

(9) R.S. Mahdi and S. A. Abdullah, *Some Adjoint Pairs of Covariant Functors between the Category of Profinite Crossed Modules and Some Related Categories*, Basrah journal of Science (accepted for publishing).

(10) Ra'ad S. Mahdi and Saba H. Kassim, Adjunctions between Peiffer Crossed Modules and Crossed Modules and between Commutator Cat¹-groups and Cat¹-groups. Journal of Basrah Researchers (sciences), Vol. 40, No. (3) A, 2014, 76-91.

(11) R. S. Mahdi, *Homological Characterization of Free Pro-C Crossed Modules*, Basrah journal of Science (A), Vol. 34(1), 2016, 44-49.