

NAME : Fadwa Salama Abu Muriefah.

OCCUPATION: Professor in Algebraic Number Theory, since March 2009.

ORGANIZATION: Dean of the Faculty of Sciences
Princess Nora Bint Abdul Rahman University (PNU)

ACADIMIC QUALIFICATIONS:

Ph.D., (1996) From Faculty of Science in (PNU) **KSA.**

Title: On The Diophantine Equation $x^2+C= y^n$.

M.Sc., (1991) From Faculty of Science in (PNU) **KSA.**

Title: On The Quotient Ring.

B.Sc., (1987) From Faculty of Science (PNU) **KSA.**

TEACHING DUTUIES:

Undergraduate:

1. Calculus
2. Foundation of Mathematics.
3. Linear Algebra.
4. Number Theory.

Postgraduate:

1. Group Representation Theory.
2. Non- commutative Rings.

POSTGRADUATE DUTIES

1. Teaching special topics.
2. Supervision of postgraduate students thesis (2).
3. Seminars.

Membership

Member of the Saudi Mathematical Society.
Member of Mathematical Reviews.

M.Sc. Thesis A warded Under My Supervision:

(On the Diophantine Quadruples) Amal AL-Rashed ,(Started Jan 2001 ,
Completed , April 2003).

Ph. D Thesis Guided:

On The diophantine Equation $ax^2=bq^m+cq^n+d$ (Amal AL-Rashed, Started
2007)

Thesis I Referred

On the diophantine Equation $ax^2 + c = dy^n$.

Research interest

1. Diophantine Equation.
2. Diophantine Quadruples

PUBLICATIONS:

Books

1. Foundations of Mathematics (In Arabic).
2. Real Analysis (1) (In Arabic).

Research Papers

- 1- (with F. Luca, S. Siksek and SZ. Tengely) On The diophantine equation $x^2 + C = 2y^n$. **Inter. J. Num Theory**. 5 (2009), 1117-1128.
- 2- (with Amal al-Rashed) On The diophantine equation $x^2 = 4q^m - 4q^n + 9$. **J.K.A. U. Science**, Vol. 20, No. 4, 2008.
- 3- The diophantine equation $px^2 + q^{2k} = y^n$. **J. Num. Theory** 90(2008) 1-6.
- 4- (with F. Luca and A. Togbe) On The diophantine equation $x^2 + 13^a \cdot 5^b = y^n$. **Glasgow Journal of Math**. 50(1) (2008), 175-181.
- 5- An exponential Diophantine Equation ". **Umm Al-Qura Univ. J. Sci. Med. Eng.** 19 (1) (2007) 95-102.
- 6- (with Yann Bugeaud) Diophantine equation $x^2 + c = y^n$: a brief overview. **Rev. Columbiana Mat.**, (40) (2006) 31-37.
- 7- On the diophantine equation $x^2 + 5^{2k} = y^n$. **Demo Math**. 319 (2) (2006) 285-289.
- 8- (with Amal al-Rashed) On The Simultaneous Diophantine Equations $y^2 - x^2 = 4$ and $z^2 - 442x^2 = 441$. **Arabian J. Science and Engineering**. Vol. 26 (1A) (2006) 207- 211.
- 9- On the diophantine equation $d_1 x^2 + 4d_2 = y^n$. **Arab J. Math. Sci.** 12(1)(2006),1-6.
- 10- (with Amal al-Rashed) On the extendibility of the diophantine triple $\{1, 5, c\}$. **Inter. J. Math. and Math. Sci.** 33 (2004), 1737-1746.
- 11- (with Amal al-Rashed) Some diophantine quadruples in the ring $\mathbb{Z}(\sqrt{-2})$. **Math. Comm.** 9(2004) 1-8.
- 12- On The diophantine equation $x^2 + q^{2k+1} = y^n$. **J. Num. Theory**. 95 (2002) 95-100.
- 13- On The diophantine equation $px^2 + 3^n = y^p$. **Tamkang J. Math. Sci.** Vol. 31(1) (2001), 79-84.
- 14- (with S. Ahktar Arif) On The diophantine equation $x^2 + 2^k = y^n$ II. **Arab J. Math. Sci.** Vol.7,(2) (2001) 67-71.
- 15- On The diophantine equation $x^3 = dy^2 \pm q^6$. **Inter. J. Math. and Math. Sci.** Vol.28 (8)(2001)493-497.
- 16- On The diophantine equation $x^2 + q^{2k} = y^n$. **Arabian J. Science and Engineering**. Vol. 26 (1A) (2001) 53- 62.
- 17- On The diophantine equation $Ax^2 + 2^{2m} = y^n$. **Inter. J. Math. and Math. Sci.** 25(6) (2001), 373-381.
- 18- On The diophantine equation $x^3 = dy^3 + p^3$. **Far. East J. Pure Math. Sci.** (FJMS) 1 (2000), 149-157.
- 19- (with S. Ahktar Arif) The diophantine equation $x^2 + 5^{2k+1} = y^n$. **Indian J. Pure. Appl. Math.** 30(3)(1999), 229-231.
- 20- (with S. Ahktar Arif) On a diophantine equation". **Bull. Austral. Math. Soc.** 57(1998) 189-198.
- 21- (with S. Ahktar Arif) On The diophantine equation $x^2 + 3^m = y^n$. **Inter. J. Math. and Math. Sci.** 21(1998), 619-620.

22- (with S. Ahktar Arif) On The diophantine equation $x^2 + 2^k = y^n$. **Inter. J. Math. and Math. Sci.** 20 (1997), 299-304.

Paper Presented at Conferences:

1. On a diophantine equation, **Fadwa Abu Muriefah (Speaker)** and S.A. Arif, The third conference of Saudi Mathematical Society in 1997.
2. Some diophantine quadruples in the ring $Z(\sqrt{-2})$. **Fadwa Abu Muriefah (Speaker)** and Amal Al- Rashid., The seventh conference of Saudi Mathematical Society in 2004.
3. The diophantine equation $px^2 + q^{2k} = y^n$. **Fadwa Abu Muriefah**, The Symposium on Global Analysis and Probability, to be held at Department of Mathematics at Qassim University during May 27-28, 2008, KSA.

