



PROF. DR. BACHOK BIN M.TAIB

PENGAJAR KHAS PK3

CONTACT

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Faculty: Fakulti Sains
Dan Teknologi

SUPERVISION

PhD - Completed: 0, Ongoing: 0

Master - Completed: 0,
Ongoing: 0

AREAS OF EXPERTISE

Numerical Analysis

ACADEMIC QUALIFICATION

PhD in Analisis Berangka (1986)

Master in Analisis Berangka (1977)

Bachelor in Matematik (1974)

RESEARCH

1. EFFECTIVE HYBRID METHOD FOR CAUCHY TYPE SINGULAR DOUBLE INTEGRALS

2019 GERAN KPT ON GOING CO-RESEARCHER

2. NEWTON-KANTOROVICH METHOD FOR SOLVING A CLASS OF NONLINEAR INTEGRAL EQUATIONS

2016 GERAN PENYELIDIKAN TRANSLASIONAL COMPLETED CO-RESEARCHER

3. MODIFIED ADOMIAN DECOMPOSITION METHOD FOR NONLINEAR FREDHOLM-VOLTERRA INTEGRO-DIFFERENTIAL EQUATIONS

2015 GERAN PENYELIDIKAN PENTADBIR COMPLETED MAIN RESEARCHER

4. OPTIMIZATION OF INTERNET PRICING UNDER MULTIPLE WIRELESS NETWORKS SERVING MULTIPLE QUALITY OF SERVICE (QOS)

2014 GERAN KPT COMPLETED CO-RESEARCHER

5. DESIGNING A NEW MODEL FOR TROJAN DETECTION

2012 GERAN PENYELIDIKAN PENTADBIR COMPLETED MAIN RESEARCHER

RESEARCH

6. OPTIMIZATION OF INTERNET PRICING UNDER MULTIPLE QOS NETWORKS

2011 GERAN KPT COMPLETED CO-RESEARCHER

7. STATUS INFORMATION SECURITY MANAGEMENT SYSTEM POLICY BASED ON BS7799 FOR IT DEPARTMENT IN IPTA IN NEARBY LEMBAH KLANG

2006 GERAN PENYELIDIKAN PANTAS BAWAH SETAHUN COMPLETED CO-RESEARCHER

8. DEVELOPING PDA-CGPA PLANNER FOR USIM

2006 GERAN PENYELIDIKAN PANTAS BAWAH SETAHUN COMPLETED MAIN RESEARCHER

PUBLICATION

1. GENERAL 2D 2 SYSTEM OF NONLINEAR INTEGRAL EQUATIONS AND ITS APPROXIMATE SOLUTION

JOURNAL OF COMPUTATIONAL AND APPLIED MATHEMATICS

2019 JOURNAL ERA CO-AUTHOR

2. EXTENDED CHEBYSHEV POLYNOMIALS FOR SOLVING BOUNDED AND UNBOUNDED SINGULAR INTEGRAL EQUATIONS

JOURNAL OF PHYSICS:CONF. SERIES

2019 JOURNAL SCOPUS CO-AUTHOR

3. BOUNDARY INTEGRAL METHOD AND CAVITATION BUBBLE MODELING

2019 BOOK MAIN AUTHOR

4. BACHOK-HASHAM POLYNOMIALS FOR SOLVING A SPECIAL CLASS OF SINGULAR INTEGRAL EQUATIONS

AMERICAN INSTITUTE OF PHYSICS

2018 JOURNAL SCOPUS CO-AUTHOR

5. MODIFIED HPM FOR HIGH-ORDER LINEAR FRACTIONAL INTEGRO-DIFFERENTIAL EQUATIONS OF FREDHOLM-VOLTERRA TYPE

JOURNAL OF PHYSICS: CONFERENCE SERIES

2018 JOURNAL SCOPUS CO-AUTHOR

6. EFFECTIVE APPROXIMATE METHOD FOR SOLVING LINEAR FREDHOLM-VOLTERRA INTEGRAL EQUATIONS.

NUMERICAL ALGEBRA, CONTROL AND OPTIMIZATION (NACO)

2017 JOURNAL SCOPUS CO-AUTHOR

7. MODIFIED HPM FOR LINEAR FRACTIONAL INTEGRO-DIFFERENTIAL EQUATIONS OF FREDHOLM-VOLTERRA

PROCEEDING OF POSTGRADUATE SEMINAR ON SCIENCE AND TECHNOLOGY (KOSIST2017)

2017 JOURNAL OTHER DATABASE CO-AUTHOR

8. BACHOK--HASHAM POLYNOMIALS APPROACH FOR EIGENVALUES PROBLEM OF LOGARITHMIC SINGULAR INTEGRAL EQUATIONS

PROCEEDING OF POSTGRADUATE SEMINAR ON SCIENCE AND TECHNOLOGY (KOSIST2017)

2017 JOURNAL OTHER DATABASE CO-AUTHOR

9. THE COMPARISON OF INTERNET PRICING SCHEME IN MULTI LINK BOTTLENECK MULTI SERVICE NETWORK

6TH INTERNATIONAL CONFERENCE ON COMPUTING AND INFORMATICS ICOCI 2017

2017 PROCEEDING NON-INDEX CO-AUTHOR

10. BACHOK-HASHAM POLYNOMIALS FOR SOLVING A SPECIAL CLASS OF SINGULAR INTEGRAL EQUATIONS

25TH NATIONAL SYMPOSIUM ON MATHEMATICAL SCIENCES (SKSM25). PAPER WILL BE PUBLISHED IN AIPCP

2017 PROCEEDING NON-INDEX CO-AUTHOR

11. SEQUENCE AND SERIES

INTEGRATION OF NAQLI AND AQLI KNOWLEDGE: AN APPLICATION TO ACTUARIAL SCIENCE, RISK MANAGEMENT & FINANCIAL MATHEMATICS CURRICULUM

2017 CHAPTER IN BOOK CO-AUTHOR

12. MODIFIED HOMOTOPY PERTURBATION METHOD FOR SOLVING LINEAR SECOND-ORDER FREDHOLM INTEGRO-DIFFERENTIAL EQUATIONS

FILOMAT

2016 JOURNAL ERA CO-AUTHOR

13. APPROXIMATE SOLUTION OF INTEGRO-DIFFERENTIAL EQUATION OF FRACTIONAL (ARBITRARY) ORDER

JOURNAL OF KING SAUD UNIVERSITY

2016 JOURNAL SCOPUS CO-AUTHOR

PUBLICATION

14. ON THE SYMBOLIC MANIPULATION FOR THE CARDINALITY OF CERTAIN DEGREE POLYNOMIALS

2ND INTERNATIONAL CONFERENCE ON MATHEMATICS, ENGINEERING AND INDUSTRIAL APPLICATIONS 2016

2016 PROCEEDING NON-INDEX CO-AUTHOR

15. OPTIMIZATION OF WIRELESS PRICING SCHEME

INTERNATIONAL CONFERENCE ON INFORMATION TECHNOLOGY AND BUSINESS (ICITB) 2015

2015 PROCEEDING NON-INDEX CO-AUTHOR

16. 2D² SYSTEM OF NONLINEAR INTEGRAL EQUATIONS AND ITS APPROXIMATE SOLUTION

THE 5TH INTERNATIONAL CONFERENCE ON CONTROL AND OPTIMIZATION WITH INDUSTRIAL APPLICATIONS

2015 PROCEEDING NON-INDEX CO-AUTHOR

17. THE IMPROVED MODELS OF INTERNET PRICING SCHEME OF MULTI SERVICE MULTI LINK NETWORKS WITH VARIOUS CAPACITY LINKS

ADVANCED COMPUTER AND COMMUNICATION ENGINEERING TECHNOLOGY

2015 CHAPTER IN BOOK CO-AUTHOR

18. DESIGNING A NEW MODEL FOR TROJAN HORSE DETECTION USING SEQUENTIAL MINIMAL OPTIMIZATION

ADVANCED COMPUTER AND COMMUNICATION ENGINEERING TECHNOLOGY

2015 CHAPTER IN BOOK CO-AUTHOR

19. DESIGNING A NEW MODEL FOR WORM RESPONSE USING SECURITY METRICS

ADVANCED COMPUTER AND COMMUNICATION ENGINEERING TECHNOLOGY

2015 CHAPTER IN BOOK CO-AUTHOR

20. NOTE ON THE CONVERGENCE ANALYSIS OF HOMOTOPY PERTURBATION METHOD FOR FRACTIONAL PARTIAL DIFFERENTIAL EQUATIONS

ABSTRACT AND APPLIED ANALYSIS

2014 JOURNAL WOS CO-AUTHOR

21. NUMERICAL METHODS FOR FRACTIONAL ORDER SINGULAR PARTIAL DIFFERENTIAL EQUATIONS WITH VARIABLE COEFFICIENTS

MATHEMATICAL PROBLEMS IN ENGINEERING

2014 JOURNAL WOS CO-AUTHOR

22. CONVERGENCE OF VARIATIONAL ITERATION METHOD FOR SOLVING SINGULAR PARTIAL DIFFERENTIAL EQUATIONS OF FRACTIONAL ORDER

ABSTRACT AND APPLIED ANALYSIS

2014 JOURNAL WOS CO-AUTHOR

23. AN EFFICIENT TROJAN HORSE CLASSIFICATION (ETC)

INTERNATIONAL JOURNAL OF COMPUTER SCIENCE ISSUES

2013 JOURNAL WOS CO-AUTHOR

24. IMPROVED MODELS OF INTERNET CHARGING SCHEME OF SINGLE BOTTLENECK LINK IN MULTI QOS NETWORKS.

JOURNAL OF APPLIED SCIENCES

2013 JOURNAL WOS CO-AUTHOR

25. IMPROVED MODELS OF INTERNET CHARGING SCHEME OF MULTI BOTTLENECK LINKS IN MULTI QOS NETWORKS.

AUSTRALIAN JOURNAL OF BASIC & APPLIED SCIENCES

2013 JOURNAL WOS CO-AUTHOR

26. FRACTIONAL VARIATIONAL ITERATION METHOD AND ITS APPLICATION TO FRACTIONAL PARTIAL DIFFERENTIAL EQUATION

MATHEMATICAL PROBLEMS IN ENGINEERING

2013 JOURNAL WOS CO-AUTHOR

PUBLICATION

27. HOMOTOPY PERTUBATION METHOD FOR FRACTIONAL BLACK-SCHOLES EUROPEAN OPTION PRICING EQUATIONS USING SUMUDU TRANSFORM

MATHEMATICAL PROBLEMS IN ENGINEERING

2013 JOURNAL WOS CO-AUTHOR

28. A NEW MODEL FOR TROJAN DETECTION USING KNOWLEDGE DATA DISCOVERY AND MACHINE LEARNING

CREATIVITY AND INNOVATION SEMINAR 4TH EXPOSITION ON ISLAMIC INNOVATION 2013

2013 PROCEEDING NON-INDEX CO-AUTHOR

29. AN IMPROVED OPTIMIZATION MODEL OF INTERNET CHARGING SCHEME IN MULTI SERVICE NETWORKS

TELKOMNIKA

2012 JOURNAL WOS CO-AUTHOR

30. STABILITY AND ACCURACY OF EXPONENTIAL EXTRAPOLATION METHOD

INTERNATIONAL JOURNAL ON ADVANCED SCIENCE ENGINEERING INFORMATION TECHNOLOGY

2012 JOURNAL WOS CO-AUTHOR

31. A NEW APPROACH OF OPTIMIZATION MODEL ON INTERNET CHARGING SCHEME IN MULTI SERVICE NETWORKS

INTERNATIONAL JOURNAL OF SCIENCE AND TECHNOLOGY

2012 JOURNAL WOS CO-AUTHOR

32. APPLICATION OF HOMOTOPY PERTURBATION AND VARIATIONAL ITERATION METHODS FOR FREDHOLM INTEGRODIFFERENTIAL EQUATION OF FRACTIONAL ORDER

ABSTRACT AND APPLIED ANALYSIS

2012 JOURNAL WOS CO-AUTHOR

33. STABILITY AND ACCURACY OF EXPONENTIAL EXTRAPOLATION METHOD

2ND INTERNATIONAL CONFERENCE ON ADVANCED SCIENCE, ENGINEERING AND INFORMATION TECHNOLOGY (ICASEIT)

2011 PROCEEDING NON-INDEX CO-AUTHOR

34. EXPONENTIAL EXTRAPOLATION METHOD FOR THE SOLUTION OF INITIAL VALUE PROBLEMS IN ORDINARY DIFFERENTIAL EQUATIONS

7TH INTERNATIONAL CONFERENCE ON MATHEMATICS, STATISTICS AND APPLICATION ICMSA 2011

2011 PROCEEDING NON-INDEX CO-AUTHOR

35. DEVELOPING CGPA PLANNER BY USING PDA FOR ISLAMIC SCIENCE UNIVERSITY OF MALAYSIA (USIM)

3RD INTERNATIONAL MICROLEARNING 2007 CONFERENCE

2007 PROCEEDING NON-INDEX MAIN AUTHOR

36. PERFORMANCE ANALYSIS OF EDGE DETECTION METHODS FOR MACROSCOPIC IMAGES

KKU SCIENCE JOURNAL

2003 JOURNAL WOS CO-AUTHOR

37. BACKPROPAGATION FOR RECOGNITION OF INVARIANTS AND SPATIAL DETECTORS OF CONSTITUENTS OF PERCEPTUAL PATTERNS

BRUNEI DARUSSALAM JOURNAL OF TECHNOLOGY AND COMMUNICATION

2003 JOURNAL WOS CO-AUTHOR

38. NEURAL NETWORKS ARCHITECTURES AS IMAGE RECOGNIZERS

ADVANCE TECHNOLOGY CONGRESS

2003 PROCEEDING NON-INDEX CO-AUTHOR

39. PHENOMENOLOGICAL LAMBDA NUCLEAR INTERACTIONS

PHYSICAL REVIEW

2002 JOURNAL WOS CO-AUTHOR

PUBLICATION

40. PROTOTYPE ARCHITECTURE FOR IMAGE RECOGNITION IN COMPLEX ENVIRONMENTS

SPATIAL INFORMATION TECHNOLOGIES IN THE NEW MILLENNIUM

2002 PROCEEDING NON-INDEX CO-AUTHOR

41. IMPLEMENTATION OF PARALLEL BOUNDARY INTEGRAL METHOD ON SPHERICAL BUBBLE DYNAMICS USING SHARED MEMORY COMPUTER

MALAYSIAN JOURNAL OF COMPUTER SCIENCE

2000 JOURNAL WOS MAIN AUTHOR

42. A LEARNING VECTOR QUANTIZATION FOR RECOGNITION OF INVARIANTS AND SPATIAL DETECTORS OF PERCEPTUAL PATTERNS CONSTITUENTS

SURANAREE JOURNAL OF SCIENCE AND TECHNOLOGY

2000 JOURNAL WOS CO-AUTHOR

43. GENERAL WEATHER PREDICTION USING TWO LEVELS BAROTROPIC MODELS

INTERNATIONAL CONFERENCE ON MATHEMATICS AND ITS APPLICATION IN THE NEW MELLENIUM

2000 PROCEEDING NON-INDEX CO-AUTHOR

44. COMPUTING EIGENVALUES OF PERIODIC STURM-LIOUVILLE PROBLEMS USING SHOOTING TECHNIQUE AND DIRECT INTEGRATION METHOD

INTERNATIONAL JOURNAL OF COMPUTER MATHEMATICS

1998 JOURNAL WOS CO-AUTHOR

45. CUBIC APPROXIMATION IN BOUNDARY INTEGRAL METHOD FOR THREE DIMENSIONAL LAPLACE EQUATION WITH ROTATIONAL SYMMETRY

SAINS MALAYSIANA

1993 JOURNAL WOS MAIN AUTHOR

46. EXISTENCE OF H^2 EXPANSION FOR SOME EXTRAPOLATION METHODS FOR SOLVING AUTONOMOUS HIGHER ORDER ODE'S

APPLIED MATHEMATICSS AND COMPUTATION

1993 JOURNAL WOS CO-AUTHOR

47. LINEAR AND QUADRATIC APPROXIMATION IN BOUNDARY INTEGRAL METHOD FOR THREE DIMENSIONAL LAPLACE EQUATION WITH ROTATIONAL SYMMETRY

PERTANIKA JOURNAL OF SCIENCE AND TECNHOLOGY

1993 JOURNAL WOS MAIN AUTHOR

48. EXTRAPOLATION METHOD FOR HIGHER ORDER ORDINARY DIFFERENTIAL EQUATIONS

MATHEMATIKA

1991 JOURNAL WOS CO-AUTHOR

49. DIRECT SOLUTION OF THIRD ORDER ORDINARY DIFFERENTIAL EQUATIONS USING RUNGE-KUTTA

MATHMATIKA

1988 JOURNAL WOS CO-AUTHOR

50. TRANSIENT CAVITIES NEAR BOUNDARIES PART II, FREE SURFACE

JAOURNAL OF FLUID MECHANICS

1987 JOURNAL WOS CO-AUTHOR

51. TRANSIENT CAVITIES NEAR BOUNDARIES PART I, RIGID BOUNDARY

JAOURNAL OF FLUID MECHANICS

1986 JOURNAL WOS CO-AUTHOR

52. MATHEMATICAL MODEL OF CAVITATION BUBBLE

2ND. NATIONAL SYMPOSIUM ON MATHEMATICAL SCIENCES

1986 PROCEEDING NON-INDEX MAIN AUTHOR

PUBLICATION

53. BOUNDARY INTEGRAL METHOD APPLIED TO CAVITATION BUBBLE DYNAMICS

MATHEMATICS CONFERENCE

1984

PROCEEDING

NON-INDEX

MAIN AUTHOR

54. HIGHER ORDER BOUNDARY INTEGRAL MODELING OF CAVITATION BUBBLES

8TH. AUSTRALASIAN FLUID MECHANICS CONFERENCE

1983

PROCEEDING

NON-INDEX

MAIN AUTHOR

CONSULTATION

1. PENILAI LUAR KENAIKAN PANGKAT AHLI AKADEMIK DI UNIVERSITI MALAYSIA TERENGGANU

UNIVERSITI MALAYSIA TERENGGANU

2015

NATIONAL

2. AHLI LEMBAGA PNASIHAT DIPLOMA SAINS, FAKULTI SAINS DAN TEKNOLOGI, UNIVERSITI MALAYSIA TERENAGGANU

2014

NATIONAL

3. AHLI LEMBAGA PENASIHAT PROGRAM DIPLOMA SAINS DAN TEKNOLOGI, FAKULTI SAINS DAN TEKNOLOGI, UNIVERSITI MALAYSIA TERENGGANU

FAKULTI SAINS DAN TEKNOLOGI, UNIVERSITI MALAYSIA T

2012

NATIONAL

4. KETUA PANEL PENAKSIR SOALAN STPM FURTHER MATHEMATICS 3 956/3

MAJLIS PEPERIKSAAN MALAYSIA

2012

NATIONAL

AWARDS/RECOGNITION

1. STARS:STREAMLINING STUDENT PERFORMANCE TRACKING FOR LECTURERS IN REAL-TIME

SCEINCE AND TECHNOLOGY RESEARCH EXPO (SCITEX)

2024 UNIVERSITY BRONZE

2. ANUGERAH PENYELIDIKAN KATEGORI SAINS DAN TEKNOLOGI (PENYELIDIKAN TERBAIK)

2014 UNIVERSITY

3. POCKET NUMERIAL SOLVER (POCKET SOLVER)

Ekspo Penyelidikan dan Ciptaan Institusi Pengajian Tinggi Antarabangsa 2007

2007 ANTARABANGSA BRONZE