

Profile Image

**PROF. MADYA DR.  
MAZLYNDA BINTI MD  
YUSUF**

PENSYARAH UNIVERSITI DS14

**CONTACT**

**Phone:** 6436

**E-mail:**  
mazlynda@usim.edu.my

**Faculty:** Fakulti Sains  
Dan Teknologi

**SUPERVISION**

PhD - Completed: 0, Ongoing: 0

Master - Completed: 6,  
Ongoing: 0

**AREAS OF EXPERTISE**

Actuarial Mathematics

Financial Mathematics

Insurances

**ACADEMIC QUALIFICATION**

PhD in Gerontology (2012)

Master in Sains Aktuari (2007)

Bachelor in Sains Aktuari (2005)

Diploma in Sains Aktuari (2003)

**RESEARCH**

**1. THE STUDY ON FUTURE AND PROSPECT OF  
IMPLEMENTING UNEMPLOYMENT TAKAFUL IN MALAYSIA**

2023 GERAN PENYELIDIKAN USIM ON GOING CO-RESEARCHER

**2. A FORMULATION OF NEW COLA-BASED PENSION SCHEME  
MODEL FOR ELDERLY SOCIETY USING ADJUSTED ANNUITY  
FACTOR**

2020 GERAN KPT ON GOING CO-RESEARCHER

**3. FORMULATION OF LONG TERM PENSION SUSTAINABILITY  
MODEL FOLLOWING POPULATION AGEING IN MALAYSIA**

2020 GERAN KPT COMPLETED CO-RESEARCHER

**4. DEVELOPING A RETIREMENT SAVINGS DECISION MODEL  
USING PATH ANALYSIS AMONG B40 GROUPS TOWARDS  
ACHIEVING SUSTAINABLE RETIREMENT.**

2020 GERAN KPT COMPLETED CO-RESEARCHER

**5. FORMULATION OF MYOCARDIAL INFARCTION MODEL  
BASED ON COX PROPORTIONAL HAZARD APPROACH AMONG  
B40 SMOKERS.**

2019

GERAN KPT

COMPLETED

CO-RESEARCHER

# RESEARCH

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## 6. A NEW APPROACH TO PROFIT CALCULATION IN ISLAMIC HOME FINANCING

2019 GERAN KPT COMPLETED CO-RESEARCHER

## 7. CREDIT RISK MANAGEMENT AND TRADE FINANCING : NEED ANALYSIS AND UTILIZATION AMONG SMALL AND MEDIUM ENTERPRISES (SME'S) IN MALAYSIA

2019 GERAN PENYELIDIKAN INDUSTRI COMPLETED CO-RESEARCHER

## 8. FORMULATION OF LONG-TERM CARE TAKAFUL PRICING MODEL BASED ON RISK FACTORS AMONG THE ELDERLY IN MALAYSIA

2019 GERAN KPT COMPLETED MAIN RESEARCHER

## 9. THE APPLICATION OF SEVERAL BAYESIAN ZERO-INFLATED REGRESSION MODELS TO MALAYSIAN MOTOR VEHICLE INSURANCE & TAKAFUL CLAIMS FREQUENCY DATA

2018 GERAN PENYELIDIKAN USIM ON GOING CO-RESEARCHER

## 10. INTELLIREHAB - INTELLIGENT MEDICAL SYSTEM WITH CUSTOMISED EXERCISES FOR PERSONALIZED HOME TELEREHABILITATION

2016 GERAN ANTARABANGSA COMPLETED CO-RESEARCHER

## 11. SUDDEN DEATH MODELLING FOLLOWING MYOCARDIAL INFARCTION AND STROKE IN MALAYSIA

2015 GERAN KPT COMPLETED CO-RESEARCHER

## 12. FORECASTING THE MORTALITY RATES ELDERLY IN MALAYSIA

2015 GERAN PENYELIDIKAN PENTADBIR COMPLETED CO-RESEARCHER

## 13. FORMULATING A NEW LONG TERM CARE MODEL FOR AGEING SOCIETY IN MALAYSIA

2015 GERAN KPT COMPLETED MAIN RESEARCHER

## 14. DEVELOPING RISK MANAGEMENT MODEL FOR MUSHARAKAH AND MUDHARABAH CONTRACT FINANCING

2014 GERAN KPT COMPLETED CO-RESEARCHER

## 15. CURRENCY HEDGING AND EXCHANGE RATE RISK:NEW EVIDENCE FROM EMERGING MARKET OF ASEAN-4

2014 GERAN PENYELIDIKAN JANGKA PENDEK COMPLETED CO-RESEARCHER

## 16. MODEL PENGURUSAN RISIKO KREDIT UNTUK PENIAGA MIKRO DAN KECIL

2013 GERAN KPT COMPLETED CO-RESEARCHER

## 17. DEVELOPING ISLAMIC CREDIT RISK MANAGEMENT MODEL FOR ISLAMIC BANK IN MALAYSIA

2013 GERAN KPT COMPLETED CO-RESEARCHER

## 18. NATURAL ENVIRONMENT RISK MANAGEMENT IN MALAYSIAN BANKING SECTOR

2013 GERAN PENYELIDIKAN JANGKA PENDEK COMPLETED CO-RESEARCHER

## 19. IMPLICATIONS OF USING UNBIASED GENDER PREMIUM RATES: COMPARATIVE STUDY BETWEEN CONVENTIONAL AND TAKAFUL PRODUCTS

2012 GERAN KPT COMPLETED MAIN RESEARCHER

# PUBLICATION

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## 1. KEFAHAMAN AMALAN SOLAT KALANGAN KOMUNITI ORANG ASLI JAKUN: TAHU BARU AMAL ATAU SUDAH TAHU TIDAK AMAL

INSIGHT JOURNAL

2024 JOURNAL MYJURNAL CO-AUTHOR

## 2. PROCEEDING OF THE 29TH NATIONAL SYMPOSIUM ON MATHEMATICAL SCIENCES (SKSM29): THEORY AND APPLICATIONS OF MATHEMATICAL SCIENCES

SIMPOSIUM KEBANGSAAN SAINS MATEMATIK (SKSM29)

2024 PROCEEDING NON-INDEX CHIEF EDITOR

## 3. ASSESSING FEATURES FOR MALAYSIAN UNIVERSITIES EXPERT DIRECTORY

2ND INTERNATIONAL CONFERENCE ON EMERGING TECHNOLOGIES AND SUSTAINABILITY

2024 PROCEEDING NON-INDEX MAIN AUTHOR

## 4. RESERVE FUND OPTIMATIZATION MODEL FOR DIGITAL BANKING TRANSACTION RISK WITH EXTREME VALUE-AT-RISK CONSTRAINTS

MATHEMATICS

2023 JOURNAL WOS CO-AUTHOR

## 5. ANALYSIS OF LENDING INTEREST RATE AND ECONOMIC ACTIVITIES IN MALAYSIA

THE 5TH ISM INTERNATIONAL STATISTICAL CONFERENCE 2021 (ISM-V)

2023 PROCEEDING NON-INDEX CORRESPONDING AUTHOR

## 6. BAB 8 INDUSTRI INSURANS DAN TAKAFUL: KESAN DAN IMPAK DI ERA PANDEMIK COVID-19

NORMA BAHARU: USAHA SAINS MEMAHAMI KEPERLUAN MASYARAKAT

2022 CHAPTER IN BOOK MAIN AUTHOR

## 7. EXPOSURE TO CONTAGION: PERCEIVED RISKS AND TRAVEL BEHAVIOURAL SHIFTS IN MALAYSIA DURING COVID-19 PANDEMIC

MALAYSIAN JOURNAL OF SCIENCE, HEALTH AND TECHNOLOGY (MJOSHT)

2021 JOURNAL OTHER DATABASE MAIN AUTHOR / CONTACT PERSON IN USIM

## 8. LONG-TERM CARE FOR REHABILITATION IN MALAYSIA

2021 BOOK MAIN AUTHOR

## 9. COVID-19: CAN MAK YANG'S BAHULU BUSINESS SURVIVE?

INSIGHTS INTO COVID-19 CRISIS: ECONOMIC & FINANCE CASE STUDIES

2021 CHAPTER IN BOOK CO-AUTHOR

## 10. A SYSTEMATIC REVIEW ON THE INSURABILITY RISK FOR LONG TERM CARE INSURANCE IN EUROPE AND ASIA COUNTRIES

MALAYSIAN JOURNAL OF SCIENCE, HEALTH AND TECHNOLOGY

2020 JOURNAL OTHER DATABASE MAIN AUTHOR

## 11. REVIEW ON PRICING MODELS FOR LONG TERM CARE INSURANCE

MALAYSIAN JOURNAL OF SCIENCE, HEALTH AND TECHNOLOGY

2020 JOURNAL OTHER DATABASE MAIN AUTHOR / CONTACT PERSON IN USIM

## 12. THE IMPACT OF AGEING POPULATION ON MALAYSIAN ECONOMIC GROWTH

ASM SCIENCE JOURNAL

2020 JOURNAL SCOPUS MAIN AUTHOR

## 13. THE CONCEPT OF HIBAH AND THEORY OF INTEREST

2020 BOOK MAIN AUTHOR

# PUBLICATION

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## 14. MENGUKUR TAHAP KESEDARAN PENYEDIAAN PELAN PERSARAAN UNTUK KAKITANGAN AWAM: KAJIAN KES KAKITANGAN PENGURUSAN DAN PROFESSIONAL (P&P) DI USIM

AMALAN TERBAIK PENGURUSAN UNIVERSITI: KOMPILASI KERTAS KERJA YANG DIBENTANGKAN DALAM SEMINAR PRAGMATIS USIM

2020 CHAPTER IN BOOK CO-AUTHOR

## 15. IMPACT OF AN AGEING POPULATION ON PENSION EXPENDITURE USING AUTOREGRESSIVE DISTRIBUTED LAG MODEL

ASM SCIENCE JOURNAL

2019 JOURNAL SCOPUS CO-AUTHOR

## 16. RACIAL AND RELIGION INFLUENCE TOWARDS NATURAL ENVIRONMENTAL RISK MANAGEMENT EVALUATION IN CREDIT FINANCING

PROCEEDINGS OF THE SECOND INTERNATIONAL CONFERENCE ON THE FUTURE OF ASEAN (ICOFA) 2017

2019 PROCEEDING NON-INDEX CO-AUTHOR

## 17. RACIAL AND RELIGION INFLUENCE TOWARDS NATURAL ENVIRONMENTAL RISK MANAGEMENT EVALUATION IN CREDIT FINANCING

PROCEEDINGS OF THE SECOND INTERNATIONAL CONFERENCE ON THE FUTURE OF ASEAN (ICOFA) 2017

2019 CHAPTER IN BOOK CO-AUTHOR

## 18. MODELLING SUDDEN DEATHS FOLLOWING MYOCARDIAL INFARCTION IN MALAYSIA

PROCEEDING OF THE 25TH NATIONAL SYMPOSIUM ON MATHEMATICAL SCIENCES (SKSM25)

2018 JOURNAL SCOPUS CO-AUTHOR

## 19. PROJECTION ON USE OF PUBLIC LONG-TERM CARE FACILITIES FOR DIFFERENT ETHNICS OF ELDERLY IN MALAYSIA

25TH NATIONAL SYMPOSIUM ON MATHEMATICAL SCIENCES (SKSM25)

2018 JOURNAL SCOPUS CO-AUTHOR

## 20. PROTECTING THE POOR IN MALAYSIA: THE VIABILITY OF MICRO-TAKAFUL SCHEME

THE 8TH ISLAMIC BANKING, ACCOUNTING AND FINANCE CONFERENCE 2018 (IBAF2018)

2018 PROCEEDING NON-INDEX CO-AUTHOR

## 21. A REVIEW ON LONG TERM CARE EXPENDITURE MODELS FOR AGING POPULATION

ADVANCED SCIENCE LETTERS

2017 JOURNAL SCOPUS CO-AUTHOR

## 22. MODELLING SUDDEN DEATHS FOLLOWING MYOCARDIAL INFARCTION IN MALAYSIA

25TH NATIONAL SYMPOSIUM ON MATHEMATICAL SCIENCES (SKSM25)

2017 PROCEEDING NON-INDEX CO-AUTHOR

## 23. ASSESSING THE ADEQUACY OF CONTRIBUTION RATES TOWARDS EMPLOYEES' PROVIDENT FUND IN MALAYSIA

4TH INTERNATIONAL CONFERENCE ON MATHEMATICAL SCIENCES (ICMS4)

2017 PROCEEDING NON-INDEX CO-AUTHOR

## 24. PROJECTION ON USE OF PUBLIC LONG-TERM CARE FACILITIES FOR DIFFERENT ETHNICS OF ELDERLY IN MALAYSIA

25TH NATIONAL SYMPOSIUM ON MATHEMATICAL SCIENCES (SKSM25)

2017 PROCEEDING NON-INDEX CO-AUTHOR

## 25. THE STUDY ON FACTOR THAT MAY INFLUENCE CREDIT RISK MANAGEMENT KNOWLEDGE AND AWARENESS AMONG MICRO BUSINESS IN MALAYSIA

INTERNATIONAL BUSINESS MANAGEMENT

2016 JOURNAL SCOPUS CO-AUTHOR

## 26. FORECASTING THE MORTALITY RATES OF MALAYSIAN POPULATION USING LEE-CARTER METHOD

SIMPOSIUM KEBANGSAAN SAINS MATEMATIK KE -23

2016 PROCEEDING NON-INDEX CO-AUTHOR

# PUBLICATION

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## 27. MERGING OF F-E-A THEORIES IN PROPOSING RISK MANAGEMENT MODEL FOR MUSHARAKAH AND MUDHARABAH CONTRACTS APPROVAL

KONVENSYEN SERANTAU PENGAJIAN ISLAM 2016 (RCIS 2016) PERINGKAT ANTARABANGSA SIRI KE 3

2016 PROCEEDING NON-INDEX CO-AUTHOR

## 28. UNBIASED GENDER PREMIUM RATES: A STUDY ON MORTGAGE REDUCING TERM ASSURANCE (MRTA)

AUSTRALIAN JOURNAL OF BASIC AND APPLIED SCIENCES

2015 JOURNAL ERA CO-AUTHOR

## 29. EXPANDING ABRIDGE LIFE TABLE BY USING HELIGMAN POLLARD METHOD: MALYSIAN EXPERIENCE 2000-2013

INTERNATIONAL JOURNAL OF BUSINESS AND SOCIAL SCIENCE (IJBSS)

2015 JOURNAL ERA CO-AUTHOR

## 30. UNBIASED GENDER PREMIUM RATES: A STUDY ON MORTGAGE REDUCING TERM ASSURANCE (MRTA)

2ND INTERNATIONAL CONFERENCE ON MATHEMATICS AND STATISTICS 2015

2015 PROCEEDING NON-INDEX CO-AUTHOR

## 31. A STUDY OF CSR ACTIVITIES AMONG MALYSIAN BANKS: COMPARISON BETWEEN ISLAMIC BANKS AND CONVENTIONAL BANKS

INTERNATIONAL CONFERENCE ON BUSINESS AND MANAGEMENT 2015

2015 PROCEEDING NON-INDEX CO-AUTHOR

## 32. RACIAL AND RELIGION INFLUENCE TOWARDS NATURAL ENVIRONMENTAL RISK MANAGEMENT IN CREDIT FINANCING

AUSTRALIAN JOURNAL OF BASIC AND APPLIED SCIENCES

2014 JOURNAL SCOPUS CO-AUTHOR

## 33. ISLAMIC CREDIT RISK MANAGEMENT IN MURABAHAH FINANCING: THE STUDY OF ISLAMIC BANKING IN MALAYSIA

AUSTRALIAN JOURNAL OF BASIC AND APPLIED SCIENCES

2014 JOURNAL SCOPUS CO-AUTHOR

## 34. FAMILY TAKAFUL MODEL IN MALAYSIA: A REVIEW ON WAKALAH AND MUDHARABAH MODELS

3RD INTERNATIONAL CONFERENCE ON ACCOUNTING, BUSINESS AND ECONOMICS 2014

2014 PROCEEDING NON-INDEX CO-AUTHOR

## 35. CREDIT RISK AND ISLAMIC FINANCIAL CONTRACTS IN ISLAMIC BANKING SYSTEM: AN ISLAMIC PERSPECTIVE

THE 6TH ISLAMIC BANKING, ACCOUNTING, AND FINANCE CONFERENCE 2014

2014 PROCEEDING NON-INDEX CO-AUTHOR

## 36. CREDIT RISK MANAGEMENT PRACTICES & THE STUDY OF MALYSIAN BANKING SYSTEM FOR COMMERCIAL LENDING

3RD INTERNATIONAL CONFERENCE ON ACCOUNTING, BUSINESS & ECONOMICS 2014 (ICABEC 2014)

2014 PROCEEDING NON-INDEX CO-AUTHOR

## 37. ISLAMIC BANK AND CORPORATE SOCIAL RESPONSIBILITY (CSR)

EUROPEAN JOURNAL OF BUSINESS AND MANAGEMENT

2013 JOURNAL WOS CO-AUTHOR

## 38. NATURAL ENVIRONMENTAL RISK MANAGEMENT: AN IMPACT ON BANKING BUSINESSES IN MALAYSIA

BANKER'S JOURNAL MALAYSIA

2013 JOURNAL WOS CO-AUTHOR

## 39. NATURAL ENVIRONMENTAL RISK MANAGEMENT IN FINANCIAL SECTOR: A STUDY ON EQUATOR PRINCIPLES

SOUTH EAST ASIA JOURNAL OF CONTEMPORARY BUSINESS, ECONOMICS AND LAW

2013 JOURNAL ERA CO-AUTHOR

# PUBLICATION

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## 40. ASSESSING THE IMPACTS OF DISRUPTIONS DURING EMPLOYMENT: A STUDY ON WOMEN IN MALAYSIA

INTERNATIONAL CONFERENCE ON SOCIAL SCIENCE RESEARCH (ICSSR) 2013

2013

PROCEEDING

NON-INDEX

MAIN AUTHOR

## 41. UNBIASED GENDER PREMIUM RATES: A STUDY ON CONVENTIONAL AND TAKAFUL PRODUCTS

EKSPLO INOVASI SAINS ISLAM 2013 (I-INOVA ""13)

2013

PROCEEDING

NON-INDEX

MAIN AUTHOR

## 42. NATURAL ENVIRONMENTAL RISK MANAGEMENT IN FINANCIAL SECTOR: A STUDY ON EQUATOR PRINCIPLES

KUALA LUMPUR BUSINESS, ECONOMICS AND LAW CONFERENCE VOLUME (2)

2013

PROCEEDING

NON-INDEX

CO-AUTHOR

## 43. NATURAL ENVIRONMENTAL RISK MANAGEMENT: CREDIT EVALUATION PERSPECTIVE OF MALAYSIAN BANKING INDUSTRY

INTERNATIONAL CONFERENCE ON SOCIAL SCIENCE RESEARCH (ICSSR) 2013

2013

PROCEEDING

NON-INDEX

CO-AUTHOR

## 44. DEMOGRAPHIC TRANSITION IN MALAYSIA: THE TRENDS AND ITS IMPLICATIONS

PIONEERING ISLAMIC SCIENCE, SPEARHEADING KNOWLEDGE

2013

CHAPTER IN BOOK

CO-AUTHOR

# CONSULTATION

---

## 1. ANALISIS SITUASI PERKHIDMATAN HEMODIALISIS DI MALAYSIA

USIM HEALTHCARE SDN BHD

2023

NATIONAL

## 2. PERUNDING SMART DIREKTORI UNIVERSITI SAINS ISLAM MALAYSIA (USIM)

USIM

2023

UNIVERSITY

## 3. CERTIFICATE COURSE IN DATA SCIENCE USING PYTHON & R

KPT-PACE GRANT

2022

UNIVERSITY

# AWARDS/RECOGNITION

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## 1. ACADEMIC ADVISOR

UNIVERSITAS PADJADJARAN - FACULTY OF MATHEMATICS AND NATURAL SCIENCES

2024 INTERNATIONAL

## 2. ACADEMIC ADVISOR

UITM SHAH ALAM

2024 STATE

## 3. ACADEMIC ADVISOR

UITM TAPAH & UITM SEREMBAN 3

2024 STATE

## 4. ACADEMIC ADVISOR

MALAYSIAN QUALIFICATIONS AGENCY (MQA)

2024 NATIONAL

## 5. ANALYSIS OF LENDING / FINANCING RATES AND PROFIT MOTIVE AMONG ISLAMIC BANKING CUSTOMERS

Semarak International Research Article Competition 2024 (SIRAC 2024)

2024 ANTARABANGSA SILVER

## 6. ANALYSING OPTIMAL CONTRIBUTION RATES FOR RETIREMENT FUND: SIMULATION AMONGST MALAYSIAN EMPLOYEES

SCEINCE AND TECHNOLOGY RESEARCH EXPO (SCITEX)

2024 UNIVERSITI BRONZE

## 7. ANALYZING DEBT COMMITMENTS DURING RETIREMENT: SIMULATION AMONGST MALAYSIAN EMPLOYEES

SCEINCE AND TECHNOLOGY RESEARCH EXPO (SCITEX)

2024 UNIVERSITI SILVER

## 8. KNOW YOUR RISK: BINGO!

SCEINCE AND TECHNOLOGY RESEARCH EXPO (SCITEX)

2024 UNIVERSITI GOLD

## 9. RETIREMENT PLANNING CALCULATOR ENHANCEMENT WITH WITHDRAWAL FEATURES: PREPARING FOR UNCERTAINTY OF FUTURE RISK

INNOVATION BANK CHALLENGE 2023 (IBC2023)

2023 UNIVERSITI SILVER

## 10. PRE-RETIREMENT WITHDRAWALS: WILL IT AFFECT MUCH?

SCIENCE AND TECHNOLOGY RESERACH EXPO (SCITEX@20TH FST)

2023 UNIVERSITI GOLD

## 11. ACADEMIC ADVISOR

MALAYSIAN QUALIFICATIONS AGENCY (MQA)

2022 NATIONAL

## 12. ACADEMIC ADVISOR

UNIVERSITI PADJADJARAN (UNPAD)

2022 INTERNATIONAL

## 13. ACADEMIC ADVISOR

MALAYSIAN QUALIFICATIONS AGENCY (MQA)

2021 NATIONAL

**14. ACADEMIC ADVISOR**

MALAYSIAN QUALIFICATION AGENCY (MQA)

2021

NATIONAL

# AWARDS/RECOGNITION

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## 15. ACADEMIC ADVISOR

UNIVERSITI UTARA MALAYSIA (UUM)

2021 NATIONAL

## 16. ACADEMIC ADVISOR

USIM

2021 UNIVERSITY

## 17. ACADEMIC ADVISOR

USIM

2021 UNIVERSITY

## 18. ACADEMIC ADVISOR

USIM

2021 UNIVERSITY

## 19. ACADEMIC ADVISOR

USIM

2021 UNIVERSITY

## 20. ACADEMIC ADVISOR

FST, USIM

2020 OTHERS

## 21. ACADEMIC ADVISOR

MALAYSIAN QUALIFICATIONS AGENCY (MQA)

2020 NATIONAL

## 22. ACADEMIC ADVISOR

UNIVERSITI UTARA MALAYSIA

2020 NATIONAL

## 23. ACADEMIC ADVISOR

MALAYSIAN QUALIFICATIONS AGENCY (MQA)

2019 NATIONAL

## 24. ACADEMIC ADVISOR

MALAYSIAN QUALIFICATION AGENCY (MQA)

2019 NATIONAL

## 25. TOP 100 RESEARCHERS USIM ( 2013-2017)

TOP 100 RESEARCHERS

2018 UNIVERSITY CERTIFICATE OF APPRECIATION

## 26. BEST PAPER PRESENTER AWARD UKM INTEGRATED INTERNATIONAL CONFERENCE 2016 (4TH INTERNATIONAL CONFERENCE ON MATHEMATICAL SCIENCES ICMS4

2016 INTERNATIONAL

## 27. STADIR : STATIC DYNAMIC INCIDENT RESPONSE MALWARE DATASET MODEL

4TH EXPOSITION ON ISLAMIC INNOVATION 2013 (I-INOVA"13)

2013 KEBANGSAAN BRONZE