



## CURRICULUM VITAE

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3. **Education** Doctor in Electrical Engineering (Dr.-Ing.), Institute of  
Measurement and Automation Engineering, Faculty of  
Electrical Engineering, Federal Armed Forces University  
Munich, 1992  
  
Sarjana (S1), Department of Physics, Faculty of  
Mathematics and Natural Sciences, Institut Teknologi  
Bandung, Indonesia, 1984.
  
4. **Teaching Experiences**  
  
1982-1984 Teacher of Physics and Electronics of Senior High School in  
Bandung  
  
Since 1984 Lecturer of Physics  
  
Since 1984 Lecturer of Electronics Course  
  
Since 1992 Lecturer of Sensors Course  
  
1993-2001 Guest Lecturer of Sensors Course in Dept. of Physics,  
University of Indonesia (UI)  
  
Since 1998 Lecturer of Electricity and Magnetism Course  
  
1992-2001 Lecturer of Advance Electronics Course  
  
Since 2001 Lecturer of Industrial Electronics Course

1992-2001	Lecturer of Microprocessor Course
Since 2001	Lecturer of Reliability and Fault Tolerance Course
Since 2009	Lecturer of Integrated Science Course
Since 2010	Lecturer of Instrumentation Physics Course
Since 2010	Lecturer of Instrumentation System Course

## 5. Research Awards

1994-1996	Principle Investigator (PI) of a research project RUT II about smart sensor with the topic " <i>Pengembangan dan pembuatan smart sensor untuk mengukur getaran mekanis (Design and Development of Smart Sensor for Measuring of Mechanical Vibration)</i> "
1997-1998	Principle Investigator of research project DIK-ITB entitled " <i>Development of Multifunction Interface Card for Control Automatic Measurement System</i> ".
1998-1999	PI of Project Grant, QUE Dept. of Physics entitled " <i>Design and Development of Fluxgate Magnetic Sensors</i> ".
1998	Member of the Research of Indonesia Toray Science Foundation (ITSF) with subject " <i>The Low and High Fields-Computer Controlled Hysteresis Loop Tracer</i> "
2000-2001	Principle Investigator (PI) of a research Grant Hibah Bersaing IX with the topic " <i>Pembuatan dan Pengembangan Sensor Medan Magnet Fluxgate (Design and Development of Fluxgate Magnetic Sensor)</i> "
2002 – 2004	Principle Investigator of Research Grant RUT IX entitled " <i>Design and Development of Magnetic Sensors based on Giant Magnetoresistance (GMR) Materials</i> ".
2004-2006	Principle Investigator (PI) of a research Grant Hibah Bersaing XII with the topic " <i>Design and Development Three Dimension Fluxgate Magnetic Sensor using Pulse Position Method</i> "
2005	Principle Investigator (PI) of a research grant B-Program of Physics Dept. entitled " <i>RBL in Advance Electronics Courses</i> "
2006	PI of Research KK ITB 2006, entitled " <i>Pembuatan Sensor Magnetik Berbasis Material GMR (Development of Magnetic Sensor Based on GMR Materials)</i> "

- 2007-2008 Principle Investigator (PI) of Hibah Pasca 2007-2008, entitled “*Desain dan Pengembangan Sensor Magnetik Resolusi Tinggi dan Beberapa Aplikasinya (Design and Development High Resolution Magnetic Sensor and Some of its Applications)*”
- 2008 PI of Riset KK ITB 2008, entitled “*Pengembangan Material Giant Magnetoresistance (GMR) dan Aplikasinya untuk Sensor Getaran (Development of GMR Material and Its Application for Vibration Sensor)*”
- 2008-2009 PI of *Development of new Giant Magnetoresistance (GMR) material with spin valve structure using OTMS reactor.*  
Asahi Glass Foundation 2008-2009
- 2008-2009 PI of Hibah Kompetensi 2008-2009 DP2M DIKTI, entitled “*Desain dan Pengembangan Sensor Mekanik Berbasis Koil Datar (Design and Development Mechanical Sensor based on Flat Coil Element)*”
- 2009 PI of Research KK ITB 2009, entitled “*Desain dan pengembangan sensor magnetik fluxgate berbasis teknologi printed circuit boards (PCBs) dan aplikasinya untuk sensor getaran (Design and Development of Magnetic Fluxgate Sensor and its Application for Vibration Sensor)*”.
- 2009 Member of Research Hibah Strategis Nasional DP2M DIKTI 2009, entitled “*Desain dan Pengembangan Sensor Getaran dan Aplikasinya untuk Online Monitoring Gempa Riset (Design and Development Vibration Sensor and Its Application for Online Earthquake Monitoring)*”
- 2009 Hufri (PI), Yulkifli, Mitra Djamal, *Desain dan Pengembangan Sensor Magnetik Fluxgate Sensitivitas Tinggi Menggunakan Model Ellips-Multicore Double Pick-up dan Aplikasinya*, Hibah Bersaing, DIKTI, 2009.
- 2009 Yulkifli (PI), Mitra Djamal, Khairurrijal dan Ramli, *Pengembangan Sensor Magnetik Presisi medan Lemah Menggunakan Material Giant Magnetoresistance (GMR)*, Hibah Bersaing, 2009.
- 2010-2012 PI of Hibah Kompetensi DP2M DIKTI, entitled “*Pengembangan Material GMR Baru Berbasis Material Organik dan Aplikasinya untuk Sensor Medan magnet (Development of New GMR Material Based on Organic Material and Its Application for Magnetic Sensor)*”.
- 2010-2011 PI of Osaka Gas Foundation of International Cultural Exchange (OGFICE), entitled “*Development of New Sensors*

*for Environmental Monitoring”.*

- 2010 PI of Program Penguatan Riset Institusi (PRI) ITB 2010, entitled “*Desain dan Pengembangan Sensor Gempa Berbasis Fluxgate (Design and Development of Earthquake Sensor Based on Fluxgate)*”.
- 2010 Dhani Herdiwijaya (PI), Mitra Djamal, Hendra Gunawan, *Mobile Lunar Crescent Observing System*, IMHERE FMIPA ITB Integrated Research Grant, 2010.
- 2011 PI of Program Riset dan Inovasi ITB 2011, Program Riset dan Inovasi ITB, *Fabrikasi Sensor Kelembaban berbasis Serat Nano*
- 2012 PI of Innovation and Group Research (Riset Inovasi dan KK) ITB, *Disain dan Pengembangan Sensor Momen Gaya Berbasis Koil Datar*
- 2012 PI of Community Service Grant, entitled, *Desain dan Pengembangan Sistem Pembangkit Listrik Portable Berbasis Tenaga Angin dan Tenaga Surya*
- 2012 PI of Asahi Glass Foundation Grant, entitled *Design and Development of Vibration Sensor Based on GMR Material*.
- 2013 PI of Innovation and Group Research (Riset Inovasi dan KK) ITB, *Disain dan Realisasi Biosensor Optik Pendeteksi Immunoglobulin Berbasis Surface Plasmon Resonance Menggunakan Streptavidin-Biotin*.
- 2013 PI of Innovation and Group Research (Riset Inovasi dan KK) ITB, *Pengembangan Portable Controlled Source Elektromagnetik Berbasis Sensor Fluxgate untuk Monitoring Sifat Magnetik Tanah Pertanian*
- 2013 PI of Asahi Glass Foundation Grant, entitled *Fabrication of PVDF Thin Film Using Evaporation Method and characterization*
- 2013-2015 PI of Research of Foreign Cooperation and International Publications, entitled *Development Of Micro-Force Material Tester*
- 2014 PI of RIK ITB 2014 entitled “An Optical Biosensor for Biochemical Detection Based on Surface Plasmon Resonance Using Distributed Feedback Grating”,
- 2013-2015 Research’s Member of “Penelitian Unggulan Perguruan Tinggi” ITB, entitled “Peningkatan Level Deteksi pada Kurva Cahaya Kejadian Pelensaan Gravitasi Mikro”.

2014-2016	PI of PMDSU Research Award, entitled “Development of Gas Sensor based on NDIR”
2014-2016	PI of PMDSU Research Award, entitled “Design and Development of Optical based Material Tester”.
2014	Member of Research Award of “ITB’s Development Project”, entitled “Fabrication of Nano patterned Sensing Layer based on Hybrid Polymer for Monitoring Environmental Pollution”.
2014-2015	Research’s Member of Research Grant of Asahi Glass Foundation, entitled “ Design of Photopumped Laser Medium Based Nd <sup>3+</sup> doped Bismuth Borate Glass”

## 6. Working Experiences

1982-1984	Assistance of Electronics Laboratory of Dept. of Physics
Since 1984	Lecturer in Institut Teknologi Bandung
1987-1992	Assistance Professor and research staff at Federal Armed Forces University Munich, Faculty of Electrical Engineering, Germany
1993-1996	Head of Electronics Laboratory of Dept. of Physics ITB.
1994-1996	Principle Investigator (PI) of a research project RUT II about smart sensor with the topic “Pengembangan dan pembuatan smart sensor untuk mengukur getaran mekanis”
Jan.-March 1994	Lecturer in Electronics Instrumentation Course for Technician Stage I, in Bandung
June – Aug. 1994	Lecturer in Electronics Instrumentation Course for Technician Stage II, in Bandung
Nov. 21 - Dec. 16, 1994	Research University Compartment for Technician Development Short Course "Laboratory Equipment Repair, Maintenance, and Use Stage II", Universitas Udayana, Bali
Since 1995	Member of Staff Editor for Journal of “Kontribusi Fisika Indonesia”, now change to “Indonesian Journal of Physics”
May – August, 1995	Guest Researcher at Federal Armed Forces University of Munich (Universität der Bundeswehr Munchen), Institute of Measurement and Automation Engineering
July 3- July 29, 1995	Head of Short Course Electronics and Instrumentation in ITB, Bandung

Aug. 1996- Jan. 1997	Lecturer Course on "Advanced Electronics I" for LPTKC, in Bandung
Nov.19- Dec. 21,1996	Indonesia Short Term Advisor of Short Course "Laboratorium Fisika Dasar", in UNCEN Manokwari
March 24 - 27, 1997	Participant course on Drafting Patent Applications in the field of Electronics and Mechanics, EC-ASEAN
1997-1998	Principle Investigator of research project DIK-ITB entitled "Development of Multifunction Interface Card for Control Automatic Measurement System".
1998-1999	PI of Project Grant, QUE Dept. of Physics entitled "Design and Development of Fluxgate Magnetic Sensors".
1998	Member of the Research of Indonesia Toray Science Foundation (ITSF) with subject "The Low and High Fields-Computer Controlled Hysteresis Loop Tracer"
Feb. 8-10, 1999	Technical Consultant for Physics Department, Faculty of Mathematics and Natural Sciences, University of Riau (Universita Riau)
Aug.2000 - Aug. 2003	Head of Electronics Laboratory of Dept. of Physics ITB
2000-2001	Principle Investigator (PI) of a research Grant Hibah Bersaing IX with the topic "Pembuatan dan Pengembangan Sensor Medan Magnet Fluxgate"
July 11-13, 2001	Chairman of Indonesian-German Conference on Instrumentation, Measurements and Communications For the Future, in Bandung
July 21 – 30, 2002	Member of the Steering Committee of 33 <sup>rd</sup> International Physics Olympiad
2002 – 2004	Principle Investigator of Research Grant RUT IX entitled "Design and Development of Magnetic Sensors based on Giant Magnetoresistance (GMR) Materials".
Dec. 2003	Tim member for development of B Program Proposal of Physics Dept. FMIPA, ITB.
May 2004	Reviewer of Student Grant of TPSDP Batch III Universitas Padjadjaran
Since 2004	Coordinator Sector of SPMB Lokal Bandung
2004 – 2005	Member of "Tim Verifikasi Usul Angka Kredit FMIPA ITB"
2004-2006	Head of HFI Bandung-Branch

Nov. 26-27, 2004	Participant of Training “Ethos 21”
Des. 2005	Proposal’s Reviewer of “Riset Unggulan ITB 2006”
2004-2005	Member of Verification Team of “Usulan Angka Kredit FMIPA ITB”
Dec. 2005	Jury of IJSO 2005
Aug. 3-5, 2005	Chairman of ICICI 2005
Dec. 7-8, 2005	Member of Organizing Committee Asian Physics Symposium
August 9-10, 2005	Participant of Service Excellence Training of ITB
August 30, 2005	Participant of workshop of National Committee of “Metrology Institute Indonesia”
Sept. 26-27, 2005	Participant of Workshop Training on The Trainers ITB from P&G
Sept. 14-15, 2005	Participant of Workshop Training for Trainers ITB
Oct. 8, 2005	Facilitator of Workshop on Emotional Intelligence
March 30-31, 2005	Participant of Training Emotional Intelligence ITB
June 1-2, 2005	Participant of “Training for Trainer” ITB
July 2005	Paper Reviewer of Material Science Form
July 21-23, 2005	Instructor of training “Pemeliharaan Sistem Instrumentasi”, LAPI ITB
July 26, 2005	Organizing Committee of National Physics Symposium 2005
Since 2005	Chairman of Cooperation Team ITB and Hochschule Ravensburg-Weingarten
2005	Principle Investigator (PI) of a research grant B-Program of Physics Dept. entitled ”RBL in Advance Electronics Courses”
Dec. 2005	Jury of The 2 <sup>nd</sup> International Junior Science Olympiad 2005
2006	Principle Investigator (PI) of ITB’s research grant of Physics Dept. entitled ”Development of GMR Material for magnetic sensors”
July 26, 2006	Guest speaker in International Colloquium “Reiz der Sensorik”, Munich, Germany
2006	Paper reviewer SICE-ICCAS 2006, Oct. 18-21, 2006, Busan, Korea

Dec. 20, 2006	Participant of Symposium of Graduate School ITB 2006 with theme “The role and development of SPS for acceleration of ITB to be research university”.
August 31, 2006	Chairman of SIBF 2006 (Seminar Instrumentasi Berbasis Fisika 2006).
Feb. 19-20, 2007	Member of Steering Committee of “The 9th Conference on Instrumentation and Control 2007”, Bandung.
Since 2007	Principle Investigator (PI) of Hibah Pasca 2007, entitled “Desain dan Pengembangan Sensor Magnetik Resolusi Tinggi dan Beberapa Aplikasinya”
August 1-3, 2007	Member of Steering Committee in “The 2007 Conference on Solid State Ionics”, Puspiptek Serpong.
August 8-9, 2007	Chairman of “International Conference on Instrumentation, Communication, and Information Technology” ICICI 2007, in Bandung
September 5, 2007	Member of Steering Committee and Paper Reviewer of “Seminar Nasional Bahan Magnet V 2007”, Solo
2007-2008	Reviewer Proposal Riset ITB
Since 2007	Editor Member of Indonesian Journal Of Physics
November 27-28, 2007	Facilitator Short Course on Sensor Technology, Basic Principles and Technology Trends, ITB, Bandung
Since February 2008	Asesor of BAN PT (National Accreditation Agency for Higher Education)
January 2008- Dec. 2010	Chief of Theoretical High Energy Physics and Instrumentation Research Group Faculty of Mathematics and Natural Sciences, Institut Teknologi Bandung
2008	Chief of SIBF 2008 (Seminar on Physics Based Instrumentation 2008)
Since 2008	Research Reviewer DP2M DIKTI, National Education Department of Indonesia
2009	Chief of ICICI-BME (International Conference on Instrumentation, Communication, Information Technology and Biomedical Engineering) 2009
Since 2009	Editor of Jurnal Sains Materi BATAN
Since October 2009	Professor for Technical Measurement and Automation Faculty of Mathematics and Natural Sciences, Institut Teknologi Bandung



Since 2009	Reviewer IEEE Sensor Journal
Since January 2010	Chief of SEM Laboratory Faculty of Mathematics and Natural Sciences, Institut Teknologi Bandung
Since Jan. 2011	Member of Senat Academic of FMIPA ITB
2011-2013	Head Commission of Research and Science Development of Senat Academic ITB
2011-2014	Vice Chairman of Indonesian Physical Society (HFI).
28 June, 5 July, 12 July, and 19 July 2011	Participant of Training, “Pengembangan Karakter Inti Matrikulasi 2011” ITB Bandung
21-22 June 2011	Reviewer of Seminar Hasil Penelitian Hibah Bersaing, P2M Jakarta
24-25 June 2011	Reviewer of Seminar Hasil Penelitian Hibah Pekerti, Pascasarjana dan Rapid, P2M Bogor
2 August 2011	Guest Lecturer in IDK Summer School 2011, Pommersfelder, Germany.
8 July-13 August 2011	Visiting Professor in Julius-Maximilians-Universitaet-Wuerzburg, Germany
14-19 August 2011	Visiting Professor in University of Applied Sciences Wiesbaden Rüsselsheim Geisenheim, Germany.
November 10-11, 2011	Organizing Committee in International Conference on Physics and Its Applications (ICPAP 2011), bandung
21 Dec. 2011-8 Jan. 2012	Visiting Professor in Institut fuer Technik Intelligenter Systeme, Universitaet der Bundeswehr Muenchen
28 February 2012	Participant of Workshop on Raman Spectroscopy and Its Applications in Nano/Molecular Sciences, Bruker Optics, Inc. and PT.Arfindo Bersinar in collaboration with Department of Chemistry,ITB
14 March 2012	Participant of Training of Trainers (ToT) Reviewer Internal Perguruan Tinggi, P2M DIKTI, Jakarta.
30 March 2012	Guest Lecturer in Studium General “Sensor Teknologi dan Aplikasinya” in UNP Padang
30 May 2012	Reviewer of Seminar Hasil Penelitian Hibah Bersaing, P2M Jakarta
June 13-15, 2012	Presenting a Lecture in The International Conference on Circuits, Systems, Communications, Computers and Applications (CSCCA '12), Latest Advance in Information Science, Circuits & Systems, G. Enescu University, Iasi,

	Romania
2-24 July 2012	Facilitator in Training 7 Habits for Highly Effective College Students, “Kegiatan Matrikulasi dan Pengembangan Karakter ITB 2012” Bandung
2-24 July 2012	Facilitator in Training Emotional Intelligence, “Kegiatan Matrikulasi dan Pengembangan Karakter ITB 2012” Bandung
10-12 July 2012	Committee in The 5 <sup>th</sup> Asian Physics Symposium (APS), Bandung
9 – 19 August 2012	Visiting Professor in Julius-Maximilians-Universitaet-Wuerzburg, Germany
8 - 9 October 2012	Instructor of workshop “Scanning Electron Microscope: Instrumentasi, Prinsip Kerja dan Analisisnya” Lab. SEM, FMIPA-ITB
November 8-9, 2012	Organizing Committee in The Fourth International Conference on Mathematics and Natural Sciences (ICMNS), Bandung
February 20-22, 2013	International Committee of International Conference on Applied Physics and Material Applications (ICAPMA 2013), Nakhon Pathom, Thailand
Oktober 10-11, 2013	Member of Organizing Committee in Simposium Fisika Nasional (SFN) XXVI dan The 3 <sup>rd</sup> International Conference on Physics and Applied Physics (ICTAP), Malang, Indonesia
November 7-8, 2013	Chairman of The 3 <sup>rd</sup> International Conference on Instrumentation, Communication, Information Technology, and Biomedical Engineering 2013 (ICICI-BME 2013), Bandung, Indonesia
May 28, 2014	Chairman of The 1 <sup>st</sup> International Conference on Sensor, Sensor System and Actuator 2014 (ICSSA 2014), Bandung, Indonesia
October 16-17, 2014	Organizing Committee in Simposium Fisika Nasional (SFN) XXVII dan The 4 <sup>th</sup> International Conference on Physics and Applied Physics (ICTAP), Bali, Indonesia

## 7. Papers

## International Journals

- 2006      **Mitra Djamal**, Darsikin, Togar Saragih, M. Barmawi, *Design and Development of Magnetic Sensors based on Giant Magnetoresistance (GMR) Materials*, Materials Science Form Vol. 517 (June 2006) pp. 207-211.
- 2010      **Mitra Djamal**, Ramli, Yulkifli, Suprijadi, Khairurrijal, *Biosensor Based on Giant Magnetoresistance Material*, International Journal of E-Health and Medical Communications (IJEHMC), Vol. 1 (2010), pp. 1-17.
- 2011      **Mitra Djamal**, Ramli, Suparno Satira, Suprijadi, *Development of Low Cost Vibration Sensor based on Flat Coil Element*, International Journal of Mathematical Models and Methods in Applied Sciences, Issue 3, Vol. 5, 2011, p 550-573.
- 2012      [Yusaku Fujii](#), [Akihiro Takita](#), [Jakapong Kaewkhao](#), **Mitra Djamal**, [Takao Yamaguchi](#), *Precision Force Measurement Using the Levitation Mass Method (LMM)*, [Applied Mechanics and Materials](#), Volume 103 (2012) pp 1-8.
- 2012      **Mitra Djamal**, Ramli, *Development of Sensors Based on Giant Magnetoresistance Material*, 3<sup>rd</sup> International Science, Social Science, Engineering and Energy Conference, Procedia Engineering 32 (2012) 60-68.
- 2012      Ramli, **Mitra Djamal**, Freddy Haryanto, Sparisoma Viridi, Khairurrijal, *Giant Magnetoresistance in (Ni<sub>60</sub>Co<sub>30</sub>Fe<sub>10</sub>/Cu) Trilayer Growth by Opposed Target Magnetron Sputtering*, Advance Material Research Vols. 535-537 (2012) pp 1319-1322.
- 2012      Widyaningrum Indrasari, **Mitra Djamal**, Wahyu Srigutomo, Ramli, *A Magnetic Distance Sensor with High Sensitivity Based on Double Secondary Coil of Fluxgate*, IOSR Journal of Applied Physics Vol.2, Issue 5 (2012), ISSN:2278-4861, p 29-35
- 2013      Ambran Hartono, Suparno Satira, **Mitra Djamal**, Ramli, Edi Sanjaya, *Poly (vinylidene fluoride) Thin Film Prepared by Roll Hot Press*, IOSR Journal of Applied Physics (IOSR-JAP), Vol.3, Issue. 1 (Jan. - Feb. 2013), pp. 07-11, ISSN: 2278-4861. e-ISSN: 2278-4861
- 2013      Ambran Hartono, Suparno Satira, **Mitra Djamal**, Ramli, Herman Bahar, Edi Sanjaya, *Effect of Mechanical Treatment Temperature on Electrical Properties and Crystallite Size of PVDF Film* Advances in Materials Physics and Chemistry, Volume 3/No.1/Maret/ 2013 hal: 71-76

- 2013 **Mitra Djamal**, Ramli, *Thin Film of Giant Magnetoresistance (GMR) Material Prepared by Sputtering Method*, Advanced Materials Research, Vol.770/September /2013 hal: 1-9
- 2013 Rahadi Wirawan, **M. Djamal**, H.K. Kim, *Response Function of Collimated Detector for Non Axial Detector-Source Geometry*, Advanced Material Research Vol. 772 (2013) pp 571-578
- 2013 Suwat Rakpanich, Natthakridta Chanthima, HongJoo Kim, **Mitra Djamal**, Pichet Limsuwan, Jakrapong Kaewkhao, *Synthesis and Luminescence Properties of Sm<sup>3+</sup> in Bismuth Borate Glass*, Advanced Materials Research, Volume 770/September/ 2013 hal: 42-45
- 2013 T. Jin, K. Watanabe, I. A. Prayogi, A. Takita, S. Mitatha, **M. Djamal**, H. Z. Jia, W. M. Hou, and Y. Fujii, *High-speed impact test using an inertial mass and an optical interferometer*, Review Of Scientific Instruments, Volume 84/July/ 2013 hal: 075116-1 sd 075116-4
- 2013 Ambran Hartono, Suparno Satira, **Mitra Djamal**, Ramli, Herman, Siti Ahmiatri, (2013): *Effect of Mechanical Treatment Temperature on Electrical Conductivity of PVDF Film*, The International Seminar on Material Magnetic (ISMM) 2013, 24-25 Oct, 2013, Batam, Indonesia
- 2013 Ambran H, **Mitra Djamal**, Suparno Satira, Herman, Ramli. (2013): *Preparation of PVDF Film Using Deep Coating Method for Biosensor Transducer Applied*, 2013 3rd (ICICI-BME), Bandung November 7-8, 2013, ISBN: 978-1-4799-1650-4 (index by Scopus)
- 2014 Widyaningrum Indrasari, W. Srigutomo, **M. Djamal**, *High Sensitivity Fluxgate Sensor for Detection of AC Magnetic Field: Equipment for Characterization of Magnetic Material in Subsurface*, Advanced Materials Research Vol. 896 (2014) pp 718-721
- 2014 Ratih Kumalasari, **Mitra Djamal**, and Edi Sanjaya, *Design and Development of Instrument for Measuring Torque and Shear Modulus for Material Research*, Advanced Materials Research Vols. 875-877 (2014) pp 2123-2127
- 2014 Edi Sanjaya, **Mitra Djamal**, Suprijadi, Gunawan Handayani, Ambran Hartono, Ramli, *Development of Ground Displacement Sensor based on Flat Coil Element for Detection of Landslide*, IOSR Journal of Applied Physics (IOSR-JAP) e-ISSN: 2278-4861. Volume 6, Issue 1 Ver. III (Feb. 2014), PP 01-06
- 2014 **Mitra Djamal**, Kazuhide Watanabe, Kyohei Irisa, Irfa Aji Prayogi,

- Akihiro Takita, Takao Yamaguchi, and Yusaku Fujii, *Dynamic Characteristics Measurements of a Force Transducer Against Small and Short-duration Impact Forces*, *Metrol. Meas. Syst.*, Vol. XXI (2014), No. 1, pp. 1–5
- 2014 Ramli, Euis Sustini, Nurlaela Rauf, and **Mitra Djamal**, *Giant Magnetoresistance in FeMn/NiCoFe/Cu/NiCoFe Spin Valve Prepared by Opposed Target Magnetron Sputtering*, *Advanced Materials Research Vols. 979* (2014) pp 85-89
- 2014 Rahadi Wirawan, **Mitra Djamal**, Abdul Waris, Gunawan Handayani, Hong Joo Kim, *Investigation of Incoherent Gamma-ray Scattering Potential for the Fluid Density Measurement*, *Applied Mechanics and Materials Vol. 575* (2014) pp 549-553
- 2014 **Mitra Djamal**, Irfa Aji Prayogi, Kazuhide Watanabe, Akihiro Takita, and Yusaku Fujii, *New Method for Evaluating Dynamic Characteristics of Cantilever Spring of Vibration Sensor*, *Advanced Materials Research Vols. 1025-1026* (2014) pp 372-378
- 2014 Alamta Singarimbun, Yasuhiro Fujimitsu, **Mitra Djamal**, and Rezkia Dewi Andajani, *Pressure Transient Modeling in Geothermal Reservoir by Using Picard-McLaurin Iteration*, *Advanced Materials Research Vols. 1025-1026* (2014) pp 959-973
- 2014 Naa, C.F., Suprijadi, Viridi, S., **Djamal, M.** *Novel Giant Magnetoresistance Model using Multiple Barrier Potential*. *ARPN Journal of Engineering and Applied Sciences*. Vol.9-2 (2014) pp.135-139.
- 2015 Prayogi, I.A., Watanabe, K., Irisa, K., Takita, A., **Djamal, M.**, Fujii, Y., *A Method For Evaluating The Mechanical Response Of Rubber-Like Material Under Small Impact Loads*. *International Journal of Innovative Computing, Information and Control*, Vol.11-3 (2015), pp. 949-954
- 2015 Kouki Kitabata, Hiroshi Iwashita, Akihiro Takita, **Mitra Djamal**, Nithiroth Pornsuwancharoen and Yusaku Fujii, *Frictional Characteristics Measurement of a Ceramic Aerostatic Linear Bearing*, *Key Engineering Materials Vols. 643* (2015) pp 167-172.
- 2015 Christian Fredy Naa, Didier Fasquelle, Manuel Mascot, Suprijadi, Sparisoma Viridi, and **Mitra Djamal**, *Influence of Grain Size to Resistivity Relaxation of La<sub>0.7</sub>Sr<sub>0.3</sub>MnO<sub>3</sub> Nanoparticles*, *Advance Materials Research Vol. 1123* (2015) pp 260-263.
- 2015 Mufti Esofita, **Mitra Djamal**, Warsito P. Taruno, Mahfud Al Huda,

- Marlin Baidillah, Gustan Pari, Ratih Damayanti, *Analysis of Wood's Capacitance Characteristic to Its Hardness*, Applied Mechanics and Materials Vol. 771 (2015) pp 161-164.
- 2015 Christian Fredy Naa, Didier Fasquelle, Manuel Mascot, and **Mitra Djamal**, *Elaboration of Low Field and Room Temperature Magnetoresistive Sensor of La<sub>0.7</sub>Sr<sub>0.3</sub>MnO<sub>3</sub> Nanoparticles Synthesized by Sol-Gel Method*, Applied Mechanics and Materials Vol. 771 (2015) pp 121-124.
- 2015 Widyaningrum Indrasari, **Mitra Djamal**, Wahyu Srigutomo, Gunawan Handayani, Nur Hadziqoh, and Ramli, *Fluxgate Based Detection of Magnetic Material in Soil Subsurface*, Applied Mechanics and Materials Vol. 771 (2015) pp 55-58.
- 2015 **M. Djamal**, Ramli, Khairurrijal and F. Haryanto, *Development of Giant Magnetoresistance Material Based on Cobalt Ferrite*, ACTA PHYSICA POLONICA A, Vol. 128 (2015), p (B-19) – (B-22).
- 2015 Mumpuni, E.S., Herdiwijaya, D., **Djamal, M.**, dan Djamaluddin, T., *Multi-wavelength Fibril Dynamics and Oscillations above Sunspot I. Morphological Signature*, Research in Astronomy and Astrophysics Volume 15, No.11 (2015) 1843-1856, DOI: 10.1088/1674-4527/15/11/007.
- 2015 Mumpuni, E.S., Herdiwijaya, D., **Djamal, M.**, dan Djamaluddin, T., (2015): *Multi-wavelength Fibril Dynamics and Oscillations above Sunspot – Wave Propagation*, Publications of The Korean Astronomical Society, Vol.30, Issue 2, pp. 59-60, DOI: 10.5303/PKAS.2015.30.2.059.
- 2016 **Mitra Djamal**, Widyaningrum Indrasari, Ramli and Wahyu Srigutomo, *Detection of Magnetic Material in Soil Subsurface using Electromagnetic Induction Method Based on Fluxgate Sensor*, Key Engineering Materials Vols. 675-676 (2016) pp 494-500.
- 2016 Juniastel Rajagukguk, Rahmat Hidayat, Suprijadi, **Mitra Djamal**, Y. Ruangtaweeep, Mati Horprathum, Jakrapong Kaewkhao, *Structural and Optical Properties of Nd<sup>3+</sup> doped Na<sub>2</sub>O-PbO-ZnO-Li<sub>2</sub>O-B<sub>2</sub>O<sub>3</sub> glasses System*, Key Engineering Materials Vols. 675-676 (2016) pp 424-429.
- 2016 N. Wantana, O. Chamlek, N. Chanthima, C.K. Jayasankar, H.J. Kim, **M. Djamal**, J. Kaewkhao, *Spectroscopic properties and Judd-Ofelt Analysis of Dy<sup>3+</sup> in Lithium Lanthanum Borate Glass for Laser Medium Application*, Key Engineering Materials Vols. 675-676

(2016) pp 389-392.

### National Journals

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- 1997 **Djamal M.,** *Disain sensor sudut RVDT berdasarkan sifat induktif*, Proceeding ETM (Experimental and Theoretical Mechanics) 1997, 20

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- 2003 Suryono, **Djamal, M.**, *Perancangan Ultrasonic Ranging Berbasis Mikrokontroler AT89C2051*, Seminar Instrumentasi Berbasis Fisika, 12-13 Juni 2003, Bandung.
- 2003 Nazar, M., **Djamal, M.**, *Ultrasonic Sensor for Distance Measurement*, Seminar Instrumentasi Berbasis Fisika, 12-13 Juni 2003, Bandung
- 2003 **Djamal, M.**, *Pengembangan Spektrometer Fourier Menggunakan Retroreflektor yang Berotasi*, Seminar Sistem Instrumentasi dan Kontrol 2003, 1-2 Juli 2003, Bandung
- 2003 Suryono, **Djamal, M.**, *Design of Ultrasonic Pulse-wave Generator Base in Microcontroller AT89C2051*, Proc. Of Annual Physics Seminar, Oct. 2, 2003, Bandung
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- 2006 **Mitra Djamal**, Rahmondia Nanda Setiadi, *Pengukuran Jarak dan Posisi Menggunakan Sensor Inframerah*, SIBF 2006, 31 Agustus 2006
- 2006 **Mitra Djamal**, Budiono, *Sistem Pemantau Data Lingkungan Reaktor Nuklir Berbasis Mikrokontroler Melalui Saluran Telepon*, SIBF 2006, 31 Agustus 2006
- 2006 Aris Suparmanto, JohanArdian, Marsandhy, **Mitra Djamal**, *Robotic Camera Sebagai Alat Monitoring Ruang Berbasis Website pada Sistem Smart Home*, SIBF 2006, 31 Agustus 2006
- 2006 Habibullah Akbar, Akfiny Hasdi Aimon, Wulan Anggreini, **Mitra Djamal**, *Studi Pengaruh Medan Magnet Ring terhadap Deposisi Lapisan Film Tipis CoFe Menggunakan Reaktor Opposed Target Magnetron Sputtering (OTMS)*, SIBF 2006, 31 Agustus 2006
- 2006 Muhamad Yuris, Zaki Su'ud, **Mitra Djamal**, Khairurrijal, *Pembuatan Alat Ukur Kadar Air Kayu dengan Pelat Tembaga Sejajar Menggunakan Mikrokontroler 89C51*, SIBF 2006, 31 Agustus 2006.
- 2007 **Mitra Djamal**, *State of the art of sensors and its role in instrumentation systems*, Proc. Of the 9th Conference on Instrumentation and Control 2007, Bandung, Feb. 2007, ISSN 0853-3814
- 2007 **Mitra Djamal**, Suyatno, Yulkifli, Rahmondia N.Setiadi, *Sensor Magnetik Fluxgate; Karakteristik dan Aplikasinya*, Seminar Bahan Magnet V, Solo, 2007
- 2007 Yulkifli, Suyatno, Rahmondia N. Setiadi, **Mitra Djamal**, *Linieritas Tegangan Keluaran Sensor Magnetik Fluxgate Menggunakan Elemen Sensor Multi-core*, Seminar Bahan Magnet V, Solo, 2007
- 2008 Z. Azhar, Yulkifli, R.N. Setiadi, **M. Djamal**, *Desain Awal Prototip Magnetometer Untuk Mengukur Medan Magnet Dalam Ruang 3 Dimensi*, Seminar Instrumentasi Berbasis Fisika 2008, 28 Agustus 2008, Bandung, Indonesia.
- 2008 **M. Djamal**, Yulkifli, R.N. Setiadi, Z. Azhar, *Pembuatan Rangkaian Digital Elektronik Sensor Fluxgate Untuk Mengukur Medan Magnet Dalam Ruang Tiga Dimensi*, Seminar Instrumentasi Berbasis Fisika 2008, 28 Agustus 2008, Bandung, Indonesia.
- 2008 F.D. Ridhani, **M. Djamal**, *Desain Awal Prototip Robot Mobil Menggunakan Informasi Peta*, Seminar Instrumentasi Berbasis Fisika 2008, 28 Agustus 2008, Bandung, Indonesia

- 2008 Yulkifli, Rahmondia N. Setiadi, Zul Azhar, **Mitra Djamal**, Khairurrijal, *Desain elemen Sensor Fluxgate Menggunakan Kumparan Sekunder Ganda Untuk Meningkatkan Resolusi Sensor*, Prosiding Seminar Nasional Fisika 2008, ISBN: 978-979-98010-3-6.
- 2011 **Mitra Djamal**, Ramli, Rahadi Wirawan, Edi Sanjaya (2011), *Sensor Magnetik GMR, Teknologi dan Aplikasi Pengembangannya*, Prosiding Pertemuan Ilmiah XXV HFI Jateng-DIY 2011, 4/9/2011, Unsoed Purwokerto Jawa Tengah.
- 2011 **Mitra Djamal**, Edi Sanjaya, Rahadi Wirawan dan Ambran Hartono (2011), *Sensor, Teknologi dan Aplikasinya*, Seminar Kontribusi Fisika Dalam Pengajaran Teknologi dan Penyelesaian Masalah Masyarakat, ITB 1-2 Desember 2011.
- 2012 Rahadi Wirawan, **Mitra Djamal**, Ambran Hartono, Edi Sanjaya, Widyaningrum Indrasari dan Ramli, *Aplikasi Sensor Ultrasonic ntuk Pengukuran Getaran Frekuensi Rendah*, Prosiding Simposium Nasional Inovasi Pembelajaran dan Sains 2012 (SNIPS 2012) ISBN 978-602-19655-3-5.
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- 2012 Rahadi W, **Mitra Djamal**, Ambran H, Edi Sanjaya, Widyaningrum I, dan Ramli. (2012): *Efek Giant Magnetoresistance dalam Spin Valve FeMn/NiCoFe/Cu/NiCoFe yang ditumbuhkan dengan Metode Opposed Target Magnetion Sputtering*, Prosiding Simposium nasional Inovasi Pembelajaran dan Sains 2012 (SNIPS 2012) 7-8 Juni 2012, Bandung.
- 2012 Ambran H, Suparno, **Mitra Djamal**, Ramli, Edi Sanjaya, (2012): *Pabrikasi Film PVDF dengan Roll Hot Press dan Karakterisasinya*, Prosiding Seminar Nasional Pendidikan 2012, Palembang Juli 2012.
- 2012 Ramli, Yenni Darvina, Yulkifli, Widyaningrum Indrasari, Ambran Hartono, Edi Sanjaya, Rahadi Wirawan, Khairurrijal dan **Mitra Djamal** (2012), *Sifat Magnetik Lapisan Tipis Material Sensor Giant Magnetoresistance Berstruktur Spin Valve*, Prosiding Seminar Nasional Fisika 2012, Palembang, 4 Juli 2012, ISBN(13): 978-979-19544-9-5.
- 2013 Widyaningrum Indrasari, **Mitra Djamal**, Wahyu Srigutomo dan Ramli, *Optimasi Rangkaian Pengolah Sinyal Analog Sensor Fluxgate Frekuensi Tinggi*, Seminar Kontribusi Fisika 2013 (SKF 2013),

Bandung.

- 2013 Rahadi Wirawan, **Mitra Djamal**, Abdul Waris, Gunawan Handayani, Dian Wijaya K. (2013): *Disain Sistem Akuisisi Data untuk Multi Channel Analyzer (MCA) Menggunakan Mikrokontroler ATmega16*, Prosiding Seminar Nasional Penelitian, Pembelajaran Sains, dan Implementasi Kurikulum 2013, ISBN 978-602-1570-08-1.
- 2014 Ahmad Aminudin, **Mitra Djamal**, Suprijadi, Daryono Hadi Tjahyono. *Uji sensitivitas Sensor Giant Magnetoresistance Terhadap Konsentrasi Larutan Fe*, Prosiding HFI, 2014.
- 2014 **Mitra Djamal**, Ambran Hartono, Ramli, Rahadi Wirawan, (2014): *Peran HFI dalam mawadahi Fisikawan dan Punggawa Fisika untuk Pembangunan Bangsa Berkelanjutan*, Prosiding Pertemuan Ilmiah XXVIII HFI JATENG & DIY 2014, PU-8, ISSN 0853-0823.
- 2015 Ahmad Aminudin, **Mitra Djamal**, Suprijadi, Daryono Hadi Tjahyono, Juniastel.R. *Desain dan Pembuatan Pembangkit Aliran Metode Roll Wiper untuk Sistem Pengukuran Konsentrasi Porfirin-Fe berbasis Sensor GMR*, Prosiding SNF, 2015
- 2015 Zannuraini, **Mitra Djamal**, Widyaningrum Indrasari, *Pengembangan Sensor Jarak Berbasis Fluxgate*, Prosiding SNF 2015.

## 8. Books

1. Mitra Djamal, *Untersuchungen zur Zuverlaessigkeit von Gassensoren*, VDI, Germany, 1992.
2. Josef Mark (Ed.), Reiz der Sensorik, *Untersuchungen zur Zuverlaessigkeit von Gassensoren*, p. 93-100, Shaker Verlag, Aachen, 2006
3. Mitra Djamal; *Diktat kuliah FI4171 Sistem Sensor*, 2006
4. Mitra Djamal; *Diktat kuliah FI6172 Elektronika Industri*, 2006
5. Mitra Djamal, *Development of vibration sensor based on flat coil element*, ITB, 2009
6. Mitra Djamal (Ed.), *Kapita Seleka Fisika Teoretik Energi Tinggi dan Instrumentasi*, Penerbit ITB, 2009.
7. Mitra Djamal, *Sensor dan Sistem Sensor: State of the Art, Kontribusi dan Perspektif Pengembangannya di Masa Depan*”, Pidato Ilmiah Guru Besar ITB, 2010.

8. *Biosensors for Health, Environment and Biosecurity / Book 2*  
*GMR Biosensors for Clinical Diagnostics*, INTECH Open Access Publisher, 2011
9. Jakrapong Kaewkhao, Phicet Limsuwan, HongJoo Kim and Mitra Djamal, *Applied Physics and Material Applications*, *Advance Material Research* Vol. 770 (2013); doi:10.4028/www.scientific.net/AMR.770
10. Mitra Djamal , Kiki Vierdayanti , Intan Muchtadi Alamsyah , Rino R. Mukti , Widyaningrum Indrasari and Muhammad Islahuddin, editors of 4th *International Conference on Mathematics and Natural Sciences (ICMNS 2012)* AIP Conf. Proc. 1589 , 1 (2014) ; <http://dx.doi.org/10.1063/1.4868735>
11. Jakrapong Kaewkhao, Mitra Djamal, and Turgay Korkut (Guest Editor), *Interaction of Radiation with Matter and Related Topics, Science and Technology of Nuclear Installations*, Hindawi Publishing Corporation, 2014
12. Witthaya Mekhum, Narong Sangwaranatee, Pichet Limsuwan, HongJoo Kim, Mitra Djamal and Jakrapong Kaewkhao (Editors), *Applied Physics and Material Applications*, *Advance Material Research* Vol. 979 (2014); doi:10.4028/www.scientific.net/AMR.979.

## 9. Patents

1. Mitra Djamal dkk : Sensor Getaran Menggunakan Koil Datar (Vibration Sensor Based on Flat Coil Element, No. Patent ID Nr. 0 021 804, 27 Agustus 2008.
2. Mitra Djamal dkk (2011) : Alat Ukur Tekanan Fluida Menggunakan Koil Datar, Nomor Pendaftaran Paten P00201000928
3. Mitra Djamal dkk (2011) :Alat Pengukur Getaran Frekuensi Rendah Menggunakan Koil Datar dan Pengolah Sinyal, Nomor Pendaftaran Paten P00201000542.
4. Mitra Djamal dkk (2011) : Alat Ukur Gempa Tiga Dimensi Menggunakan Sistem Sensor Fluxgate (File Date : P00201100928)
5. Mitra Djamal dkk (2012): Alat ukur Momen Gaya Menggunakan Sensor Koil Datar. ( No Pendaftaran P00201200438)
6. Mitra Djamal dkk : Draft Paten dengan judul “DC- MAGNETRON SPUTTERING TAK SEIMBANG Mtra TARGET GANDA UNTUK DEPOSISI LAPISAN TIPIS NANOPARTIKEL”, proses pendaftaran
7. Mitra Djamal dkk : Draft Paten dengan judul “SENSOR GETARAN FREKUENSI RENDAH MENGGUNAKAN MATERIAL GIANT MAGNETORESISTANCE”, dalam proses pendaftaran.

## 10 Journal Reviewer

1. IEEE Sensor Journal
2. Material Science Form
3. Indonesian Journal of Physics
4. Jurnal Sains dan Materi (BATAN)
5. MEAS Elsevier
6. Editor and Reviewer IJEHMC (International Journal of e-Health and Medical Communication)
7. Editor and Reviewer JETA (Journal of eHealth Technology and Application)
8. Jurnal MIPA (Universitas Negeri Malang)
9. Jurnal Matematika dan Sains (JMS FMIPA ITB)
10. ITB Journal of Science

## 11 Invited Speaker

1. Invited speaker in Applied University Ravensburg Weingarten, Ravensburg, Germany, Oktober 2002.
2. Invited speaker in *International Conference of Functional Materials and Devices (ICFMD-2005)*, Kuala Lumpur, Malaysia, 6-8 Juni 2005.
3. Invited speaker in *International Colloquium "Reiz der Sensorik"*, Universitaet der Bundeswehr Muenchen, Germany, 16 Juli - 1 Agustus 2006.
4. Invited speaker in *The 9th Conference on Instrumentation and Control 2007*, Bandung, Feb. 2007.
5. Invited speaker in *International Conference on Instrumentation, Communications, Information Technology, and Biomedical Engineering (ICICI-BME)*, Bandung 2009.
6. Invited Speaker in "Seminar Nasional Himpunan Fisik Indonesia (HFI) Wilayah Jawa Tengah dan Daerah Istimewa Yogyakarta (Jateng dan D.I.Y) 2011", Purwokerto, 9 April 2011.
7. Invited Speaker in "*International Conference on X-Ray Microscopy and Smart Materials (ICXMS) 2011*", Solo, 13 Juni 2011
8. Invited Speaker in "*Seminar Kontribusi Fisika 2011*", Bandung, 1-2 Desember 2011.



9. Invited speaker in *International Conference on Instrumentation, Communications, Information Technology, and Biomedical Engineering (ICICI-BME)*, Bandung, 8-9 November 2011.
10. Invited Speaker in “*International Conference on Physics and Its Applications (ICPAP) 2011*”, Bandung, 10-11 November 2011
11. Invited Speaker in “*Seminar Kontribusi Fisika (SKF) 2011*”, Bandung, 1-2 Desember 2011.
12. Invited Speaker in *3rd International Science, Social Science, Engineering and Energy Conference*, Rose Garden Riverside, Nakhon Pathom, Thailand, February 2-5, 2012.
13. Invited Speaker in “*International Conference on Theoretical and Applied Physics (ICTAP) 2012*”, Palangka Raya.
14. Invited Speaker in 12<sup>th</sup> Asia Pacific Physics Conference (APPC 2013), 14-19 Juli 2013, Makuhari, Chiba, Jepang
15. Invited Speaker in Simposium Fisika Nasional (SFN) XXVI dan The 3<sup>rd</sup> International Conference on Physics and Applied Physics (ICTAP), 10-11 Oktober 2013, Malang, Indonesia
16. Invited Speaker in International Conference on Applied Physics and Material Applications (ICAPMA 2013), 20-22 Fe. 2013, Nakhon Pathom, Thailand
17. Invited Speaker in The 3<sup>rd</sup> International Conference on Instrumentation, Communication, Information Technology, and Biomedical Engineering 2013 (ICICI-BME 2013), 7-8 Nov. 2013, Bandung, Indonesia (Chairman)
18. Invited Speaker in 5<sup>th</sup> International Science, Social Science, Engineering and Energy Conference 2013 (I-SEEC2013), 18-20 Dec. 2013, Kanchanaburi, Thailand
19. Invited Speaker on The 2<sup>nd</sup> BK2Plus International Workshop for Young Physicist, August 20-21, 2014, GyungJu, Korea.
20. Invited Speaker on national seminar entitled “Seminar Nasional Workshop dan Musyawarah Daerah Himpunan Fisika Indonesia (HFI)”, March 12-13, 2014, Universitas Negeri Gorontalo, Gorontalo, Indonesia.
21. Invited Speaker on national conference entitled “The 5<sup>th</sup> International Conference Green Technology”, 7<sup>th</sup> November 2014, Islamic State of University Maulana Malik Ibrahim (UIN) Malang, Indonesia
22. Invited Speaker on National Seminar entitled “Seminar Nasional Fisika 2014”, 26<sup>th</sup> April 2014, Universitas Ahmad Dahlan, Yogyakarta, Indonesia.
23. Invited Speaker on national seminar entitled “Seminar Nasional Fisika dan Terapannya IV”, 15<sup>th</sup> November 2014, Universitas Airlangga, Surabaya, Indonesia

24. Invited Speaker on “International Conference on Physics and Applied Physics (ICTAP) 2014”, 16<sup>th</sup>-17<sup>th</sup> October 2014, Bali, Indonesia
25. Invited Speaker on International Conference on Computational and Experimental Science and Engineering (ICCESEN) 2014, 25<sup>th</sup>-29<sup>th</sup> October 2014, Antalya, Turki.
26. Invited Plenary Speaker on national symposium entitled “Simposium Nasional Inovasi dan Pembelajaran Sains (SNIPS) 2014, 10<sup>th</sup>-11<sup>th</sup> June 2014, Bandung, Indonesia.
27. Keynote Speaker on “The 2nd International Conference on Applied Physics and Material Applications” (ICAPMA 2015), Thailand, 28 – 30 May 2015.

## 12 Former Students

### Master Thesis

1. Suyatno (20205009); Desain dan Pengembangan Sensor Magnetik Fluxgate dan Aplikasinya untuk Mengukur getaran, 2007
2. Muhamad Yuris (30202002); Pengembangan Sistem Identifikasi Jenis Kayu Dengan Citra dan Sensor Ultrasonik Berbasis Saraf Tiruan, 2007
3. Wandy Praginda (20205002); Desain Awal Fluxgate Magnetometer Menggunakan Kumputan Skunder (Pick-up Coil) Ganda Sebagai Penentu Posisi Benda (Tracking Position dalam Tiga Dimensi, 2008
4. Usep Sukmana (20206032); Simulasi Gerak Parabola, 2008
5. Zul Azhar (20206035); Pembuatan Snsor Magnetik Fluxgate dan Aplikasinya Untuk Mengukur Medan Magnet, 2008
6. Rahmondia Nanda S (20206013); Desain dan Pembuatan Sensor Getaran Frekuensi Rendah Berbasis Koil datar, 2009
7. Zul Anwar(20207044); Pembuatan Alat Ukur Kecepatan Sudut Berbasis Sensor Fluxgate Sebagai Media Pembelajaran Fisika, 2009
8. Ismu Wahyudi (20207086); Prototip Sensor Muai Berbasis Fluxgate Magnetometer, 2009
9. Mohammad Djamil M Nur (20207094); Prototip Alat Ukur Arus Listrik DC Berbasis Sensor Magnetik Fluxgate Menggunakan Elemen Sensor Model Printed Circuit Boards (PCBs), 2009
10. Fatahah Dwi Ridhani (20208303); Metoda Estimasi Frekuensi Berbasis Modifikasi Pendekatan Fungsi Sinus dan Zero-Cross Fitting Method (ZFM), 2011

11. Ellys Mei Sundari (20209012); Desain dan Pembuatan Alat Ukur Tekanan Udara Dengan Sensor Koil Datar Berbasis Mikrokontroler ATMEGA 16, 2011
12. Sandijal Putra (90209013); Pengembangan Sensor Getaran Dua Dimensi Menggunakan Sistem Sensor Fluxgate, 2011
13. Islahudin (90209034); Pengembangan Sensor Getaran Dua Dimensi Berbasis Koil Datar, 2011
14. Ratih Kumalasari (20210003); Desain dan Pembuatan sensor Momen Gaya Dengan Sensor Koil Datar Berbasis Mikrokontroler ATMEGA 16, 2012
15. Abdul Muid (20210010); Perancangan dan Pembuatan Rangkaian Elektronik Potensiostat Menggunakan Mikrokontroler ATXMEGA 32, 2012
16. WidyaArrum Gammayani (20210015); Pengembangan Penguat Awal Sistem Spektroskopi Nuklir Berbasis Detektor Sintilasi, 2012
17. Irfa A Prayogi (20210303); Dynamic Calibration of Force Transducer Using Levitation Mass Method, 2013
18. Khaeriah Dahlan (20209016); Optimalisasi Daya Panel Surya Dengan Menggunakan Metode Maximum Power Point Tracker (MPPT), 2013
19. Aisyah Amin (90211009); Desain Alat Ukur Untuk Mengukur Kadar Larutan Porfirin+Fe Berbasis GMR, 2013
20. Sony Wardoyo (20210008); Desain Sensor Keseimbangan Ban Mobil Berbasis Sensor Magnetik Giant Magnetoresistance, 2013
21. Ary Prabowo (20211311); Pengembangan Sensor Getaran Frekuensi Rendah Berbasis Sensor Giant Magnetoresistance (GMR), 2014
22. Nur Hadziqoh 20211301 Pengembangan Aplikasi Sensor Fluxgate 3D Untuk Karakterisasi Sifat Magnetik Pada Tanah, 2014
23. Hafizh Prihtadi (20212030); Perancangan Sistem Multi Sensor Berbasis Jaringan Sensor Nirkabel, 2014
24. Ilham Adi Putra (20212008); Sistem Pengukuran Kerusakan Permukaan Jalan Dengan Menggunakan Sensor Ultrasonik Berbasis Mikrokontroller Atmega 328, 2014
25. Mufti Esofita (20212303)
26. Asrizal Deri Futra (20212053)

### **Doctoral Dissertation**

1. Hendro (30205002); Kajian Efek Serapan Optik Gelombang Evanescent Dalam Sistem Spektroskopi SPR, 2010
2. Imam Taufiq (30205003); Komputasi Paralel Untuk Analisa Burnup Reaktor Nuklir Dengan Pemrograman Multicore, 2010
3. Yulkifli (30206006); Pengembangan Elemen Fluxgate dan Penggunaannya Untuk Sensor-Sensor Berbasis Magnetik dan Proksimiti, 2010
4. Ramli (30208003); Penumbuhan Lapisan Tipis Giant Magnetoresistance CoFe<sub>2</sub>O<sub>4</sub> dan Karakterisasinya, 2014
5. Widyaningrum Indrasari (30209005), 2014
6. Rahadi Wirawan (30209004), 2014

### **External Examiner**

1. Arifin bin Abas (GS23388); Development of Internet based Instrumentation System for the Study of Hall Effect, School of Graduate Studies, Universiti Putra Malaysia, 2011
2. Liew Seng Choy (GS17967); Development of Pulsed Laser Ablation Deposition (PLAD) for Fa Universiti Putra Malaysia, 2014
3. Fasih Ud Din (GS27385); Superconducting Properties of Multilayered Thin Films Structure, School of Graduate Studies, Universiti Putra Malaysia, 2014

Bandung, Oktober 2014

Prof. Dr.-Ing. Mitra Djamal