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| CURRICULUM VITAE | | | DSCN1119 - Copy - Copy |
| Name  Place and Date of Birth | :  : | Rachmawan Budiarto  Yogyakarta, September 23rd, 1971 |

**Summary**

Since 2005/2006 he gives various topics in energy: renewable energy, energy policy, energy economics in undergraduate in 4 programs in Faculty of Engineering, Faculty of Economics and Business, other 3 post-graduates programs.

In period of 2005 - 2018 he was/is involved in at least 48 programs in 60 sites of hydropower, solar energy, bioenergy, geothermal, ocean energy, hybrid energy, green building, energy audit for industry, natural gas, and guidelines for development of nuclear power plant in Indonesia. In renewable energy and sustainable development, he was/is involved in programs funded by international sources (Korindo - South Korea, GTZ/GIZ - Germany, JICA - Japan, SIDA – Sweden, USAID - United States, MCAI – United States, Non Aligned Movement – Centre for South-South Technical Coop (NAM CSSTC), Shizuoka University – Japan, Australia - Indonesia Centre (AIC), SGP – UNDP and Erasmus+.

Since July 2017 he is director of Centre for Development of Sustainable Region which is collaborative centre for research managing 8 universities in Indonesia and USA. Since November 2017 he is deputy director of Directorate of Community Service UGM. Since April 2015 he is a member of Evaluation and Accreditation Committee - IABEE (Indonesia Accreditation Board for Engineering Education). As a manager for Small and Medium Enterprise (SME) Development Program in Institute for Research and Community Services (LPPM) UGM (2006 – 2012) and as a member of executive board in Development Agency for Technology and Innovation Yogyakarta (BPTIY) (1999 – 2008) he provided technopreneurship services, including financial support, for more than 1000 SMEs, especially in Yogyakarta and Central Java. He was involved in programs of green economy and energy policy of Regional Development Planning Board and Ministry of National Development Planning (Bappenas). Since 2011 he is active as trainer for new and renewable energy training centre of Ministry of Energy and Mineral Resources. In 2009 - 2012 he was active in disaster mitigation activities in LPPM UGM and Indonesian National Board for Disaster Management (BNPB).

Since 2011 he is single/main author in three books and co-author in one buku. In 2012 his team was awarded the Regional Centre of Expertise Recognition Award of United Nations University for "Preparing Green Economics Through Synergy Among Courses in Engineering Physics, Gadjah Mada University"

He got also experience from traveling to 291 towns and cities in 24 countries, including 33 provinces in Indonesia. During 2009 - 2018 he became a team leader in 19 programs (renewable energy, energy audit, green building, sensors/instrumentation and defense).

**Ringkasan**

Sejak 2005/2006 ia memberi kuliah, antara lain konservasi energi, rekayasi energi angin, rekayasa energi air, pengantar teknologi energi terbarukan, dan kebijakan energi (berubah menjadi integrasi energi terbarukan), ekonomi energi di 4 program studi S1 di Fakultas Teknik dan Fakultas Ekonomika dan Bisnis serta di 3 program studi S2 di UGM.

Dalam periode 2005 - 2018 ia pernah/sedang terlibat di paling tidak 48 program di 60 lokasi pembangkit listrik tenaga air, teknologi energi matahari, teknologi energi bio, teknologi panas bumi, energi laut, teknologi energi hibrid, bangunan hijau, audit energi untuk industri, gas alam, dan panduan pembangunan PLTA di Indonesia. Dalam bidang energi terbarukan dan pembangunan berkelanjutan, ia pernah/sedang terlibat di berbagai program yang didanai berbagai sumber internasional (Korindo – Korea Selatan, GTZ/GIZ - Jerman, JICA - Jepang, SIDA – Swedia, USAID – Amerika Serikat, MCAI – Amerika Serikat, Non Aligned Movement – Centre for South-South Technical Coop (NAM CSSTC), Shizuoka University – Jepang, Australia - Indonesia Centre (AIC), SGP – UNDP dan Erasmus+.

Sejak Juli 2017 sebagai direktur Centre for Development of Sustainable Region yang merupakan pusat kolaborasi riset 8 perguruan tinggi di Indonesia dan Amerika Serikat. Sejak November 2017 menjadi sekretaris Direktorat Pengabdian kepada Masyarakat UGM. Sejak April 2015 ia menjadi anggota Evaluation and Accreditation Committee - IABEE (Indonesia Accreditation Board for Engineering Education). Saat sebagai manajer program pengembangan UMKM di LPPM UGM (2006 – 2012) dan pengurus Badan Pengembangan Teknologi dan Inovasi Yogyakarta (BPTIY) (1999 – 2008) ia memberi layanan technopreneurship, termasuk layanan dukungan keuangan, bagi lebih dari 1000 UMKM, utamanya di DIY dan Jawa Tengah. Ia aktif di berbagai program ekonomi hijau dan kebijakan energi Bappenas. Sejak 2011 ia aktif sebagai pelatih di Pusdiklat Energi Baru dan Terbarukan ESDM. Periode 2009 - 2012 ia aktif di program mitigasi bencana alam di LPPM UGM dan Badan Nasional Penanggulangan Bencana (BNPB).

Sejak tahun 2011 menjadi penulis tunggal/penulis pertama dalam tiga buku dan co-author dalam satu buku. Tahun 2012 bersama tim ia mendapat penghargaan the Regional Centre of Expertise Recognition Award of United Nations University berkat pengembangan metoda pengajaran "Preparing Green Economics Through Synergy Among Courses in Engineering Physics, Gadjah Mada University".

Ia mendapat tambahan pengalaman dari traveling-nya ke 291 kota besar/kecil di 24 negara, termasuk 33 provinsi di Indonesia. Dalam periode 2009 - 2018 ia menjadi ketua tim dalam 19 program (energi terbarukan, audit energi, green building, sensor/instrumentasi dan hankam).

**Language**

English, German, Arabic (in reading), Indonesian, Javanese

**Education Record**

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| 2010 - 2016  1996 – 1998  1990 – 1995  1987 – 1990  1984 – 1987  1978 – 1984 | :  :  :  :  :  : | Doctor, Mechanical Engineering Fac. of Engineering, Universitas Gadjah Mada  Master of Engineering (cum laude, in Coastal Engineering),  Post – graduate program, Universitas Gadjah Mada, Yogyakarta – Indonesia  Dept. of Civil Engineering, Faculty of Engineering, Universitas Gadjah Mada, Yogyakarta – Indonesia  Senior High School, SMA 1, Yogyakarta – Indonesia  Junior High School, SMP 8, Yogyakarta – Indonesia  Elementary School, SDN Ungaran III, Yogyakarta – Indonesia |

**Non- formal Education**

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| 1991 – 1993 | : | Islamic Boarding School “Budi Mulia”, Yogyakarta |

**Employment/Organizational Record**

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| Aug 1998 – ....  Nov 2017 - …  March 2019 - …  Oct 2017 - …  Jul 2017 - …  April 2010 – March 2018  Sep 2016 – Oct 2017  Aug 2016 - …  Oct 2011 – Nov 2015  Dec 2009 – Nov 2014  April 2007 – Nov 2009  Jan 2007 – March 2009  Nov 2006 – Dec 2012  July 2006 – March 2007  Oct 2000 – May 2005    Nov 1999 - 2008  May – Sept 1999  Sept 1998 – May 1999  1991 – 1996  1993 – 1995  1991 – 1995  1988 – 1989 | :  :  :  :  :  :  :  :  :  :  :  :  :  :  :  :  :  :  :  :  :  : | Lecturer, Dept of Engineering Physics, Universitas Gadjah Mada, Yogyakarta – Indonesia  Deputy Director, Directorate of Community Service, Universitas Gadjah Mada  Greenship Professional, Green Building Council Indonesia  Founder, Reta Consulting Indonesia, Jakarta  Director, Centre for Development of Sustainable Region, Sustainable Higher Education Research Alliances, USAID – Ministry of Research and Higher Education  Coord. Of Dev. Of Hydropower, Geothermal-, Solar-, Wind-, and Nuclear Energy, Centre for Energy Studies, Universitas Gadjah Mada, Yogyakarta  Manager of Wisdom Park, UGM Residence, Universitas Gadjah Mada  Member, Expert Board, Center for Economic Democracy Studies, Universitas Gadjah Mada  Head, Dept. Of Inter-Institutions Relation, National Executive Board of Purna Paskibraka Indonesia  Member, Executive Board - Dept. Of Community Development, Universitas Gadjah Mada Alumni Community (KAGAMA) 2009 - 2014  Vice Head, Dept of Engineering Physics, Universitas Gadjah Mada, Yogyakarta – Indonesia  Vice Head, Industrial Safety Engineering Master Program Faculty of Engineering, Universitas Gadjah Mada, Yogyakarta – Indonesia  Coordinator/Manager, Small and Medium Entreprise Development Program, Institute of Research and Community Services (IRCS), Universitas Gadjah Mada, Yogyakarta – Indonesia  Member Of Executive Board on Students, Alumni and Community Service, Dept of Engineering Physics, Universitas Gadjah Mada, Yogyakarta – Indonesia  Doctoral Researcher, Institute of Water Resources Management and Rural Engineering, Universitaet Karlsruhe – Germany on 1) 3D computational fluid dynamics and 2) energy policy with special emphasize on renewable tech.  Secretary, Yogyakarta Technology and Innovation Development Board, Yogyakarta - Indonesia  Member of Executive Board, Dept. of Physics Engineering,  Universitas Gadjah Mada, Yogyakarta - Indonesia  Assistance of Director, Academy of Information and Computer Management “ASTER“, Yogyakarta – Indonesia  Instructor, Realia Indonesian Language School, Yogyakarta – Indonesia  Chairman, “Purna Paskibraka Indonesia” Organization in Yogyakarta Region  Founder and Member of Executive Board, Group on Study and Implementation of Islam “KSAI Al-Uswah”, Yogyakarta – Indonesia  Chairman, Student Organization (OSIS), Senior High School, SMA 1, Yogyakarta – Indonesia |

**Professional Association**

1. Member, Persatuan Insinyur Indonesia (PII – Indonesia Engineer Association)
2. Greenship Professional, Green Building Council Indonesia (GBCI)

**Award and Outstanding Achievement**

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| 2012  2000  1998  1989  1988 | :  :  :  :  : | United Nations University – RCE Recognition Award for “Preparing Green Economics Through Synergy Among Courses in Engineering Physics Universitas Gadjah Mada”  DAAD Germany Scholarship (2000 – 2004)  Cum laude in Coastal Engineering, Postgraduate program, Universitas Gadjah Mada, Yogyakarta – Indonesia  Yogyakartas 2nd Best Senior High School (“Pelajar Teladan DIY ke-2”)  Member, National Flag-Hoisting Team, (Paskibraka Nasional) |

**Professional Services on Energy**

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| Feb 2019 - ongoing  Sep 2018 – July 2019  Apr – Nov 2018  Feb – Nov 2017  Jul – Sep 2017  April 2016 – Dec 2017  Sep – Des 2016  Jul – Sep 2016  Jun – Aug 2016  May – Nov 2016  Feb - Nov 2016  Feb – Nov 2016  Feb – Dec 2016  Okt 2015 – Mar 2016  Sep - Dec 2015  Jul - Dec 2015  May - Nov 2015  Feb - Nov 2015  Feb - Nov 2015  Oct 2014  Aug 2014  April – Dec 2014  Feb – Dec 2014  Feb – Aug 2014  Feb 2014 - 2016  Jan – Feb 2014  Nov 2013  Aug – Oct 2013  May 2013 - ongoing  Jun – Nov 2013  Juli – Aug 2013  Feb – Aug 2013  Jan – Dec 2013  Nov – Dec 2012  Oct – Dec 2012  Oct – Dec 2012  Aug 2012  Jan – Dec 2012  Dec 2011 - Apr 2012  Mar 2011 – Jan 2012  Nov – Dec 2011  Aug – Des 2011 | :  :  :  :  :  :  :  :  :  :  :  :  :  :  :  :  :  :  :  :  :  :  :  :  :  :  :  :  :  :  :  :  :  :  :  :  :  :  :  :  :  : | Team Member, Mastering Energy Supply for Isolated Areas (MESfIA) Erasmus+ team  PIC and Expert team member, Social and Technical Study on Renewable Energy, UGM and SGP/UNDP  Team leader, Photovoltaics for Fisheries Facilities, Pemprov Papua  Team member, Renewable Energy Based Smart Micro Grid, ITB - UGM - IPB, Penelitian Unggulan Strategis Nasional (PUNAS), Dir. Of Higher Education, Min. Of Higher Education and Research and Technology, Australia - Indonesia Centre (AIC)  Team leader, Energy Audit in Oil Storage Facility – Pertamina Medan, Centre for Energy Studies UGM  Expert team, Increasing of Poor Household Income Through Green Business Practices Supported by Renewable Energy, MCAI – USA, Consortium Lakpesdam NU - PUSTEK UGM - PSE UGM - CCES Indonesia, Jambi and West Sumatera  Member, Dev. Of Directory to Dev. Small and Outer Islands 2016, Fac. Of Animal Science UGM, - Kementerian Desa, Pembangunan Daerah Tertinggal, dan Transmigrasi  Team leader, Energy Audit in LPG Station – Pertamina Binjai, Centre for Energy Studies UGM  Team member, Guideline Development, Assessment, Industrial Award, Gov. of Boyolali Central Java  Expert, Planning of Strategy and Program on Energy and Mineral Resources, Regional Development Planning Agency (Bappeda) Yogyakarta  Dev. Of Measurement Device and Detail Standard Operating Procedure (SOP) For Greenship Dev. Of Green Building, Insgreeb, PUPT Grant, Dir. Higher Education, Min. of Res., Tech and Higher Education  Team member, Renewable Energy Based Smart Micro Grid, ITB - UGM - IPB, Penelitian Unggulan Strategis Nasional (PUNAS), Dir. Of Higher Education, Min. Of Higher Education and Research and Technology, Australia - Indonesia Centre (AIC)  Team Member, Development of Bio Powerplant Toward Energy Self Sufficient and Environmental Friendly Fruit Market, Inovative-Productive Research Grant (RISPRO) LPDP, Indonesian Ministry of Finance  Team Member, Study of Positioning of PLN in Government Concept of Domestic Gas Supply Aggregator, Centre for Energy Studies – PT PLN  Team leader, Dev. Of Photovoltaics-Based Water Supply System in Nyamuk Island, Karimunjawa, UGM  Team leader/member, Dev. Of Photovoltaics System (10 kWp) and Energy Monitoring System in Universitas Gadjah Mada (Student Dormitory and Central Library), UGM - WIKA  Expert, Planning of Strategy and Program on Energy and Mineral Resources, Regional Development Planning Agency (Bappeda) Yogyakarta  Team member, Optimization of Universitas Gadjah Mada Energy System to Support Yogyakarta as Smart and Green City, Min. Of Higher Education and Research and Technology, Australia - Indonesia Centre (AIC)  Team member, Renewable Energy Based Smart Micro Grid, ITB - UGM - IPB, Penelitian Unggulan Strategis Nasional (PUNAS), Dir. Of Higher Education, Min. Of Higher Education and Research and Technology, Australia - Indonesia Centre (AIC)  Team member, Study on Scenarios of Energy Demand in Transportation Sector 2015-2025, R&D of Indonesian Ministry of Transportation  Team Leader, Verification on Energy Audit, Pertamina Fuel Installation Rewulu, Centre for Energy Research UGM  Team Leader, Development of Clean Energy Technology and Local Institution as Comprehensive Scheme in Karimunjawa, ICED-USAID  Team Member, Development of Bio Powerplant Toward Energy Self Sufficient and Environmental Friendly Fruit Market (cap: 4 tons/day), Inovative-Productive Research Grant (RISPRO) LPDP, Indonesian Ministry of Finance  Expert, Planning of Strategy and Program on Energy and Mineral Resources, Regional Development Planning Agency (Bappeda) Yogyakarta  UGM Team Manager, Collaboration in strengthening the community participation on rural electrification with renewable energy, EnDev GIZ – Centre for Energy Studies UGM  Expert, Evaluation of rural electrification programs in Indonesia  with focus on renewable energies, LCORE-INDO, GIZ - Jerman  Team member, Green Prosperity Program, Bappenas  Team Leader, Energy and Preliminary Greenship Audit, Pertamina Fuel Installation Rewulu, Centre for Energy Research UGM  Member, Team of INSISTS (Indonesia Sweden Initiative for Sustainable Energy Solution), Fac of Engineering, Yogyakarta and Stockholm - Sweden  Member, Dev. of Integrated Smart and Green Building Research Group, Yogyakarta and Taipeh Taiwan  Expert, Roadmap of Renewable Energy Development, Regional Development Planning Agency (Bappeda) Gunung Kidul Yogyakarta  Expert, Planning of Strategy and Program on Energy and Mineral Resources, Regional Development Planning Agency (Bappeda) Yogyakarta  PIC, Dev. of Renewable Energy Industry (Solar) Based on Local Competence in Gunung Kidul and Bantul - Yogyakarta, Grant of PHK-I Dir. Gen. Of Higher Education – Centre for Energy Studies UGM  Team coordinator, Pre Feasibility Study on Use of Renewable Energy Technology in Tanjung Jati B Coal Powerplant Jepara  Member, Team of Developing Network and Facilitation for Energy Research, Yogyakarta and Masdar Institute Abu Dhabi, CES & IRCS UGM  Team management, Front-end engineering design (FEED) for Geothermal Powerplant in Karaha West Java – Pertamina Geothermal and Centre for Energy Study UGM  Team Leader, Verification on Energy Audit of Pertamina Fuel Installation Rewulu, Centre for Energy Research GMU  PIC, Dev. of Renewable Energy Industry (Solar) Based on Local Competence in Gunung Kidul and Bantul - Yogyakarta, Grant of PHK-I Dir. Gen. Of Higher Education – Centre for Energy Studies UGM  Team Leader, Green Rest Area Design, Jakarta – Cikampek Toll Road  Member, Management Team for Hybrid Energy Area in Bantul Yogyakarta, Ministry of Research and Technology  Expert, Feasibility Study on PV Based Water Supply System, Gov. of Lembata, NTT  Expert, Guidline for Development od Renewable Energy in Yogyakarta, Pemprov DIY |
| Jun – Nov 2011  Apr 2011  Feb – Aug 2011  Feb – Aug 2011  Jan – Des 2011  Sept – Nov 2010  Aug – Nov 2010  June – Nov 2010  June – Nov 2010  June – Nov 2010  Feb – July 2010  Jan – Okt 2010  Nov 2009 – Mar 2010  Nov – Des 2009  Oct – Dec 2009  Sep – March 2010  April – Oct 2009  April – Oct 2009  April – Oct 2009  Nov 2008  Jul 2008 – Feb 2009  Jul – Aug 2008  April 2008  Jan – May 2008  Jan – Feb 2008  Jan – Feb 2008  Nov 2007 – Feb 2008  Jun 2007 – Jan 2008  Feb – Nov 2007  Jan 2007  Dec 2006 – Jan 2007  Sept - Dec 2005  Aug, 1998 | :  :  :  :  :  :  :  :  :  :  :  :  :  :  :  :  :  :  :  :  :  :  :  :  :  :  :  :  :  :  :  :  : | Expert, Team on Design and Instalation of Hydram System in Disadvantaged Village in Manggarai Timur East Nusa Tenggara, Ministry of Dev. of Least Developed Area – IRCS UGM  Contributor, Guideline for Dev. of Biogas Based Energy Independent Village, Coord Ministry on Economics  Expert, Team on Risk Analysis on Dev. of Floating Storage and Regasification Unit, Pertamina – Centre for Energy Studies UGM  Expert, Team on Feasibility Study on PLTM (Minihydro Powerplants) Isal 3, Detail Engineering Design of PLTM Rumahkay 3 (2 x 2000 kW) Central Maluku, PLN - Surveyor Indonesia  PIC, Dev. of Renewable Energy Industry (Wind) Based on Local Competence in Gunung Kidul and Bantul - Yogyakarta, Grant of PHK-I Dir. Gen. Of Higher Education – Centre for Energy Studies UGM  Expert, Team on Formulation of Academic Guidline For Draft of Regional Regulation on Energy, Bappeda DIY  Leader, Team on Design and Application of PV Based Water Pump System, Lembata – East Nusa Tenggara,  Hilink Program, Dir. Gen. Of Higher Education, 2010  Expert, Design and Instalation of Hydram Pump System in Disadvantaged Areas, Dairi North Sumatera, Ministry of Dev. of Least Developed Area – IRCS UGM  Member, Team for Development of Laboratory for Energy Independent Village in Gorontalo – Provincial Gov. of Gorontalo  Member, Team on Study for Energy Security in Asia Pacific – Its Implication to Indonesia, Min. for Foreign Affair – Center for Energy Studies, Universitas Gadjah Mada  Leader, Team on Comprehensive Study On Small Hydropower For Rural Electrification, JICA - IRCS UGM  Member, Team on Dev. Of An Appropriate Water Filter For Clean Water Supply in Rural Areas, Dept. Of Eng. Physics UGM – iBoP Asia, Ateneo School of Government Filipina  Expert, Detail Engineering Design of Sinamar Hydropower, West Sumatera, Center for Energy Studies, Universitas Gadjah Mada  Expert, Feasibility Study on Sea Current and Wave Energy, Ternate and Morotai North Maluku, Center for Energy Studies, Universitas Gadjah Mada  Expert, Feasibility Study on Microhydro Powerplants in Wai Larik, Wai Wau, Wai Mokel Flores - East Nusa Tenggara, Center for Energy Studies, Universitas Gadjah Mada  Expert, Design on PLTM (Minihydro Powerplants) Kalibeber, PLTM Leksono (Wonosobo – Central Java) dan PLTM Purbasari (Purbalingga – Central Java), Indonesia Power Mrica – Institute of Research and Community Services (IRCS) UGM  Grantee, Design on Integration Between Design and Manufactur Facility of Mini Gas Turbine for Biomass Waste, Rusnas Grant, Dir. Gen. Of Higher Education  Grantee, Design on Moving Blade Water Wheel, Rusnas Grant, Dir. Gen. Of Higher Education  Grantee, Design on Vertical Axis Water Wheel for Irrigation Channel, Rusnas Grant, Dir. Gen. Of Higher Education  Expert, Feasibility Study of Renewable Energy and Clean Water Infrastructure, Sebuli Relocation Program, Senakin Coal Mining South Kalimantan, PT Arutmin Indonesia - Center for Energy Studies, UGM  Expert, Evaluation on Design of PLTM (Minihydro Powerplant): PLTM Menarung – Central Kalimantan (36,5 kW), PLTM Purukcahu – Central Kalimantan (232,6 kW), PLTM Malewa – Poso (235,6 kW), PLTM Polanggua – Gorontalo (108,6 kW), PLTM Mohiyolo – Gorontalo (351,9 kW), PLTM Wae Lega – Manggarai Flores (2430 kW), Center for Energy Studies, Universitas Gadjah Mada  Coordinator, Team on Survey and Design of Alternative Energy Utilization Infrastructure for Energy Endurance Strengthening of Micro, Small and Medium Enterprises in Boyolali, IRCS Universitas Gadjah Mada – Boyolali Local Government.  Team Leader, Detail Engineering Design PLTMH (Microhydro Powerplant) Siwuluh I (250 kW) and PLTMH Blimbing (70 kW), Banjarnegara - Central Java  Expert, Market Potential Mapping and Marketing Strategy for Photovoltaic, Biofuel and Wind Turbine Industry, Physics Engineering Dept. Universitas Gadjah Mada - PT Korindo Heavy Industry Jakarta  Member, Curriculum/Syllabus Evaluation Team, Master Of Engineering System - Microhydro Concentration, Faculty of Engineering, Universitas Gadjah Mada  Expert, Design on System for Utilizing Waste of Palm Oil Industry as Renewable Energy Resources, Central Kalimantan, Center for Energy Studies, Universitas Gadjah Mada  Expert, Evaluation on Design Of PLTM (Minihydro Powerplant): PLTM Sita (836 kW), PLTM Ndungga (1691 kW), PLTM Masabewa (1088 kW), PLTM Pekatan (457 kW) dan PLTM Santong (841 kW), NTT - NTB, Center for Energy Studies, Universitas Gadjah Mada  Member, Renewable Energy Development Team, PLN Of North Sulawesi –Central Sulawesi -Gorontalo and Faculty of Engineering, Universitas Gadjah Mada  Team Member, Study Of Economical Impact Nuclear Power Plants Operation in Muria Peninsula, BATAN – Dept. Of Physics Engineering, Universitas Gadjah Mada  Expert, Focus Group Discussion, Development and Revitalization of Implementation Strategy of National Energy Policy by Sector, Energy and Mineral Resources Dept. - Gama Cendekia Universitas Gadjah Mada  Expert, Feasibility Study On Microhydro Power Plant Tumbang Atei (34 kW) – Katingan and Bonoh (31 kW) - Murung Raya, Central Kalimantan, Center for Energy Studies, Universitas Gadjah Mada  Expert, Development of Safety Standard on Flood Hazard for Nuclear Power Plants on Coastal and River Sites, Nuclear Energy Regulatory Agency, Jakarta  Researcher, Survey of River Flow Power Plant, Brantas River – Eastern Java, Center for Energy Studies, Universitas Gadjah Mada |

**Professional Services on Military and Defense Technology**

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| Jan 2009 – Oct 2010  April – Oct 2009  April – Oct 2009 | :  :  : | Team Leader, Integrated System of Production and Test of Double Base Solid Rocket Propelant Based on Jathropha Oil, Grant for Applied Research, Research Grant of Min. of Research and Technology  Team Leader, Mechanical Gyroscope for Torpedo dan Smart Bomb Navigation System, Rusnas Research Grant of Dir. Gen. Of Higher Education  Grantee, Design on Rocket Static Test Facility Based on Guidence and Control System (GCS), Rusnas Research Grant of Dir. Gen. Of Higher Education |

**Professional Service on Micro, Small and Medium Enterprise Development and Regional Economic Development**

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| Jun – Aug 2014  Sept 2011 – Des 2012  Apr 2010 – Des 2012  Apr – Sept 2012  Feb 2012  Apr 2011 – Dec 2011  Oct 2009 – March 2010  July 2009  April 2009  March 2009  Jan – Oct 2009  March 2007 - Feb 2009  Jan 2009  Dec 2008 – Apr 2009  Nov 2008  Aug 2008  July – Aug 2008  June – Dec 2008  May 2008  Oct – Nov 2007  Oct 2007  July – Aug 2007  Nov 2006  Nov – Dec 2006  Aug – Oct 1998 | :  :  :  :  :  :  :  :  :  :  :  :  :  :  :  :  :  :  :  :  :  :  :  :  : | Expert, Guideline on Cleaner production in Rattan Industry, Perkumpulan Untuk Peningkatan Usaha Kecil (PUPUK) Bandung  Member, Joint Secretariat of the Pertamina Comprehensive Approach on Village Development, Pertamina – Ministry for Disadvantaged Area Development – UGM (Sorong, Bima)  Member, Coord. Team of Regional Economic Development (RED – STEER), Bappenas – GTZ/GIZ  Team member, Integration Data System Development for Use of Biological Resources, Ministry for Disadvantaged Area Development  Coordinator, Business Game, Telkom – IRCS UGM  Team member, Increasing Investment for Disadvantaged Area, Ministry for Disadvantaged Area Development  Team Member, Study on Policy of SME Development in Indonesia, JICA – IRCS UGM  Presenter, Seminar on Development of Small and Medium Enterprise Based on Agricultural Product, Training Centre, Dept. of Internal Affairs Yogyakarta Region  Team Leader, Seminar and Exhibition on Alternative Energy for SME Development in Yogyakarta, BTC-BPTIY  Presenter, National Seminar on Students Entrepreneurship, Post Graduate Students Organization UGM, Yogyakarta  Team Secretary, ISO 9001:2008 for SME Development Program, IRCS UGM  Trainer, Training on Appropriate Technology For Islamic Boarding - TEKPAT MENARA, Hifzul Bi'ah Islamic Boarding Cangkringan, Sleman Yogyakarta  Team Member, Feasibility Assessment Team for Metal Industry in Klaten, Ministry of Research and Technology – BTC BPTIY  Team Member, Technology Injection for CV. Exotic Tropical Rainforest, Coastal Women's Group "Niswati Bahari", and Tofu Small Industry “Ngudi Lestari” , Ministry of Research and Technology – BTC BPTIY  Presenter, Training on Capital Management for Cooperatives, Office of Industry, Trade and Cooperation, Yogyakarta  Organizer, SME exhibition, Business Dialog, Workshop on SME Product Marketing, Research Week UGM 2008  Coordinator, Survey on Renewable Energy Technology for SME in Boyolali, Office of Industry, Trade and Cooperation, District Boyolali – KKN PPM UGM  Team Leader, Innovation Guide for SME Development IRCS UGM  Presenter, Improving Performance of Financial Support for SME based on Corporate Social Responsibility, IRCS UGM  Organizer, Exhibition of SME Product, Research Week UGM 2007  Presenter, Workshop on Business Plan for SME, Research Week UGM 2007  Coordinator, Entrepreneur Live Skill, Ministry of Education - KKN PPM ICRS UGM  Trainer, Workshop on SME Development (Emping, Nutt Eggs, Asmat Statues Souvenir), Program SIBERMAS, Yogyakarta  Organizer, SME Exhibition and Seminar on Technopreneurship, Research Week UGM 2006  Member, Team of Feasibility Study on Yogyakarta Technocentre, Yogyakarta Chamber of Commerce – South Westphalia Hagen/Germany Chamber of Commerce |

**Professional Services on Disaster Management**

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| April 2012  Jun 2011 | :  : | Team member, Site Assessment on Disaster Response in Banda Aceh, Calang and Meulaboh, LPPM UGM  Expert, Research Fasilitation Workshop, BNPB |
| Nov 2010  Okt – Nov 2010  Nov – Des 2009 | :  :  : | Member, Asisstance Team, Plan on Management of Disaster in Local Area, National Agency for Disaster Management (BNPB)  Logistics Coord., Disaster Response Unit UGM  Team Leader, Dev. of PV Based Power Supply and Recharging Mobile Unit for Disaster Area, Fac. of Engineering, UGM |

**Professional Services on Education**

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| Apr 2015 - ongoing  Oct 2016  Dec 2014  Jan – Dec 2010  July – Dec 08  Aug 07 – Jan 08  July – Dec 2006 | :  :  :  :  :  :  : | Member, Evaluation and Accreditation Committee-IABEE (Indonesia Accreditation Board for Engineering Education)  Education for Sustainable Development (ESD) Meeting, Sejahtera Park, RCE Tongyeong, Korea  Visiting Lecturer on Education for Sustainable Development Student Exchange Program, Shizuoka University, Japan  Grantee, Technopreneurship Dev. in Renewable Energy Integrated Four Courses Activities, RAMP - Bogor Agriculture Institute  Grantee, Deep and Comprehensive Learning Program in Sustainable Energy System trough Integrated Four Courses Activities, Competence Grant PHK A2, Dept. Of Physics Engineering, Universitas Gadjah Mada  Grantee, Development of Functional Awareness in Comprehensive Learning Program on Sustainable Energy System trough Synergy between Energy Policy Class and Industrial Management Courses, Competence Grant PHK A2, Dept. Of Physics Engineering, Universitas Gadjah Mada  Grantee, Energy Policy Learning Program trough Method of Student Centered Learning Blended with Web dan Multimedia Technology, Grant for Development of Course  Content - Inherent, Universitas Gadjah Mada |
| Aug 2007 – Jan 2008 | : | Grantee. Concept of Technology Comprehensive Learning Program as medium to stimulate growth the UGM values. |
| July – Des 2006 | : | Head, Div. Information Technology, SP4 Project, Sistem of Information on implementation of KKN Tematik (obligatory social action internship for advanced university student), Institute of Research and Community Services (IRCS), Universitas Gadjah Mada |

**Other Professional Services**

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| May – Nov 2012  Jul 2007 – ... | :  : | Team Leader, Design on Monitoring and Management System for Road and Bridge Quality, Stranas Research Grant of Dir. Gen. Of Higher Education  Member, Team associate student on Dept. Religion scholarship program, Universitas Gadjah Mada |
| Aug 2007 – Jan 2008  July 2006 – May 2007  June 2006 – June 2007  Jan 2006 – Dec 2007  Sept 2005 – Dec 2007  April – June 1998  Jan – Feb 1996  Jan – Feb 1996  Sept 1995 - Feb 1996  July – Oct 1994 | :  :  :  :  :  :  :  :  :  : | Grantee, Comprehensive Learning Program of Technology Concept as Stimulate on Growth of Gadjah Mada University Value, Teaching Grant – PPKB Due Like, Universitas Gadjah Mada  Member, Board of Community Service, Faculty of Engineering, Universitas Gadjah Mada  Team Leader on Acreditation Preparation, Engineering Physics Program, Dept. Of Physics Engineering, Universitas Gadjah Mada  Member, Team of 4th DUE-like Batch Project, Universitas Gadjah Mada  Member, Team on Preparation of Institution Accreditation, Quality Insurance Office, Universitas Gadjah Mada  Researcher Assistant, Tanah Lot Beach Conservation Project, Inter University Center - Engineering Sciences, Universitas Gadjah Mada  Researcher Assistant, Dumai Harbor Development Project, Inter University Center – Engineering Sciences, Universitas Gadjah Mada  Researcher Assistant, Jetty Design Project at North Sulawesi Province, Inter University Center – Engineering Sciences, Universitas Gadjah Mada  Researcher Assistant, Breakwater Design at Indonesian Navy Base, Teluk Ratai, Lampung, Inter University Center – Engineering Sciences, Universitas Gadjah Mada  Researcher Assistant, Research on Artificial Reef Breakwater, Inter University Center – Engineering Sciences, Universitas Gadjah Mada |

**Selected Seminar/Workshop/Training on Energy**

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| Nov 2018  Oct 2016  Aug 2016  Mar 2016  Jan 2016  Sep 2015  Aug 2015  May 2015  April 2015  Nov 2014  Aug 2014  2011 - 2014  Nov 2013  Sep 2013  Aug 2012  Jun 2012  Jan 2012  Nov 2011  Oct 2011  Sept 2011  July 2011 | :  :  :  :  :  :  :  :  :  :  :  :  :  :  :  :  :  :  :  :  : | Keynote Speaker, Eng. Physics Intl. Conf 2018, ITS Surabaya  Training Coordinator/Trainer, International Training Program On Bioenergy, Non Aligned Movement – Centre for South-South Technical Coop (NAM CSSTC) and New and Renewable Energy Education and Training Centre, Min. Of Energy and Mineral Resources (8 countries)  Trainer (Renewable Energy), Planning Quality Improvement and Facilitation for Development of Food-Vulnerable Area, Min. of Village, Development of Disadvantaged Regions and Transmigration  Participant, Nuclear Non-Proliferation and Safeguards Education, UGM, Texas A&M University, U.S. Dept. of Energy, Yogyakarta  Panelist, Panel Discussion: Experience in Implementing Least Cost Renewable Projects in Indonesia, GIZ LCORE and Ministry of Energy and Mineral Resources, Jakarta  Trainer, Course of Micro Hydro Powerplant Design, Center for Energy Study Center, Universitas Gadjah Mada  Training Coordinator/Trainer, International Training Program On Bioenergy, Non Aligned Movement – Centre for South-South Technical Coop (NAM CSSTC) and New and Renewable Energy Education and Training Centre, Min. Of Energy and Mineral Resources (9 countries)  Participant, Training of Public Private Partnership in Renewable Energy, Energy Delta Institute - Energy Business School, Ministry of National Development Planning/Bappenas, Amsterdam  Trainer, Course of PV Application Development, GIZ ENDEV - Center for Energy Study Center, Universitas Gadjah Mada  Training Coordinator/Trainer, International Training Program On Renewable Energy: Biogas Energy for Community Dev., Non Aligned Movement – Centre for South-South Technical Coop (NAM CSSTC) and New and Renewable Energy Education and Training Centre, Min. Of Energy and Mineral Resources (10 countries)  Participant, Workshop on Enhancement of Nuclear Engineering Curriculum with Nuclear Security Subjects, PNS – USA, Yogyakarta  Trainer, In House Training on Biogas Development, New and Renewable Energy Education and Training Centre, Min. Of Energy and Mineral Resources (Mataram, Gorontalo, Padang, Bengkulu, Palu, Lampung)  Guest Speaker, Technical Exchange Forum, Dit. Of Gas, Pertamina, Bogor  Speaker, FGD for Mid Term National Development Plan, National Development Planning Agency (Bappenas), Yogyakarta  Resource Person, UN-CECAR Renewable Energy Curriculum Development Working Group Meeting, Yogyakarta  Presenter, Energy Diversification in Yogyakarta, Seminar of Energy Resilience in Yogyakarta, Yogyakarta Provincial Legislative Council, Yogyakarta  Trainer, Course of Feasibility Analysis on Mini Hydro Power Plant, Indonesian Electricity Community, Jakarta  Trainer, Workshop for Renewable Energy Development, Bangka Belitung University  Presenter, Architecture Design, Indonesian Islamic University (UII), Yogyakarta  Presenter, Human Resource Capacity Building to Support Utilization of Renewable Energy as a Clean Energy Source, Ministry for Energy and Mineral Resources, Yogyakarta  Trainer, Course of PV Application Development, Center for Energy Study Center, Universitas Gadjah Mada |
| Juni 2011  Mei 2011  Nov 2010  Nov 2009  Sept 2009  Apr 2009  Feb 2009  Nov 2008  July 2008  Nov 2007  Aug 2007  Aug 2007  Aug 2006  Aug 2005  Oct 2002  Dec 1998 | :  :  :  :  :  :  :  :  :  :  :  :  :  :  :  : | Presenter, Evaluation on Meteorology dan Hydrology in Nuclear Powerplant Site, Bapeten  Presenter, Workshop on Energy Independent Village, LKPP OTDA, Yogyakarta  Presenter, Seminar on Development of National Energy Policy and Strategy, Ministry of National Development Planning (PPN)/Bappenas, Solo  Presenter, National Meeting on Energy Independent Village, Coord. Min. on Economy, Bandung  Member, Presenter Team, National Seminar on Renewable Energy Development, Board of Regional Research, Gorontalo Province  Presenter, Regional Seminar, Correlation Between Energy Crisis and Environment, Chemical Perspective, Universitas Negeri Yogyakarta  Presenter, Training on Energy Self-Sufficient Village, Chain Centre, Dept. of Chemical Eng., Fac. of Eng., UGM  Presenter, Workshop on Development of National Energy Infrastructure, Ministry of National Development Planning (PPN)/Bappenas, Yogyakarta  Presenter, Seminar on Energy Law, Dept. Of Energy and Mineral Resources – Office of Industry, Trade and Cooperation, Yogyakarta  Presenter, 9th Congress Of National Science, LIPI (Science Institute of Indonesia) – Dept of National Education, Jakarta  Participant, FNCA Seminar on Human Resources Development, BATAN and Japan Atomic Energy Agency, Yogyakarta  Presenter, International Video Conference on Sustainable Energy, Organizer: Universitas Indonesia - Jakarta  Instructor, Capacity Building Training for Local Stakeholders for Microhydro Powerplant Development Center for Energy Studies, Universitas Gadjah Mada, Yogyakarta  Presenter, SURED (Sustainable Resource Dev.) Seminar on South Region Development - South Pawonsari Bakulrejo, Dept. Of Civil Engineering, Fac. Of Engineering, Universitas Gadjah Mada  International Seminar, Alternative Energien – Energien der Zukunft, Afrikanisch-Asiatischen Studentenförderung e.V., Lehrte-Sievershausen, Germany  Instructor, Workshop on Renewable Energy Technology  Directorate General of Electricity and Energy Development – Government of Yogyakarta Province, Yogyakarta |

**Other Selected Seminar/Workshop/Training**

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| May 2017  Nov 2016  Oct 2016  Oct 2015  Apr 2010 – Dec 2012  May 2012  July 2007  Aug 2006  July 2006  Dec 2005  Aug 2005  Sept 2002  Apr – Sept 2000  Sept 1999 – March 2000  Sept 1998  Feb 1997 | :  :  :  :  :  :  :  :  :  :  :  :  :  :  :  : | Participant, Program Evaluator (PEV) Training, ABET (Accreditation Board for Engineering and Technology), Baltimore USA  Participant, Greenship Associate Training Program, Green Building Council Indonesia, Jakarta  Contributor, Workshop in Education for Sustainable Development, Regional Centre for Expertise, Tongyeong - Korea  Participant, Training for Evaluator Trainer, International Accreditation for Engineering Education, JABEE - JICA, Tokyo and Kumamoto  Participant, Regional Economic Development (RED) Steer and Green Economics Training Program, Inwent – GTZ/GIZ (3 years), Germany, India and Indonesia  Participant, Internal Audit Training 19011:2011 (ISO), TUV Rheinland, Yogyakarta  Participant, Training on E-learning System, Computer Centre – Universitas Gadjah Mada, Yogyakarta  Participant, Training on Guideline of Learning Program Based on Student Centered Learning, DUE-like, Universitas Gadjah Mada  Participant, Training on Student Centered Learning Method, Fac. Of Engineering, Universitas Gadjah Mada  Presenter, Information Technology For Education Workshop, Education Board of Yogyakarta Special Region, Kepatihan Yogyakarta  Presenter, Dialog on Science and Technology For Business, BID (Regional Information Board), Yogyakarta  Presenter, International Seminar on Irrigation Water Management in an Intercultural Context with Special Reference to Indonesia and Germany, IWK – Karlsruhe University, Karlsruhe - Germany  Participant, Course of Deutsche Language, Goethe Institut Freiburg, Germany  Participant Course of Deutsche Language, Goethe Institut Jakarta  Participant, Intl. Workshop on Project Management, Partnership Project between the Chambers of Industry and Commerce of Yogyakarta and South Westphalia Hagen/Germany, Yogyakarta  Participant, Intl. Short Course on Coastal Engineering, BPPT – JICA, Yogyakarta |

**Patent**

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| 2018 | **:** | (accepted on March 12nd, 2018). **Budiarto, R**., Hawibowo, S., Wijaya, R., Waruwu, M.M., Peralatan Pengukur Permukaan Jalan Terhadap Aspek Guncangan pada Kendaraan Dengan Memanfaatkan Teknologi Komputer (Computer-Based Measurement Device of Road Surface based on Shock of Vehicle) |

**Book**

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| 2019  2017    2015  2011, 2013 | :  :  :  : | Pertiwiningrum, A., **Budiarto, R**., Widhyharto, D.S., and Supriadi, Biogas untuk Kemandirian Energi di Perdesaan (Biogas for Rural Energy Independence), xv + 194, Universitas Gadjah Mada Press, Yogyakarta  **Budiarto, R**., Widhyharto, D.S., Prasetya, A., A.R. Wardhana, and J.J., Hidayat, Energi Surya untuk Komunitas - Meningkatkan Produktivitas Masyarakat Pedesaan Melalui Energi Terbarukan (Solar Energy for Community – Increasing Productivity of Rural Community Trough Renewable Energy), xxiv + 217 pp., Konsorsium Kemala  Wahid, M., Ghazali, A.M., Ubaid, A., Wardhana, A.R., Masud, I., Mohammad, J., Ma’afi, M., **Budiarto, R**., Fikih Energi Terbarukan Pandangan dan Respons Islam atas Pembangkit Listrik Tenaga Surya (Fiqh of Renewable Energy – Islamic View and Response on Photovoltaics), Konsorsium Kemala  **Budiarto, R.,** Putero, S.H., Suyatna, H., Astuti, P., Saptoadi, H., Ridwan, M.M. and Susilo, B., Pengembangan UMKM: Antara Konseptual dan Pengalaman Praktis (Development of Small and Medium Enterprise: Between Concept and Practical Experience), Universitas Gadjah Mada Press, Yogyakarta  **Budiarto, R**., Kebijakan Energi – Menuju Sistem Energi Yang Berkelanjutan (Energy Policy – Towards Sustainable Energy System), xiv + 280 pp., Samudera Biru, Yogyakarta |

**Scientific Paper**

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| 2019  2018  2017  2016  2015  2014  2013  2012  2011  2010  2009  2008  2007  2006  2000  1998 | :  :  :  :  :  :  :  :  :  :  :  :  :  :  :  : | Desi Luvita, N.R., Kholid, R.M., **Budiarto, R**., A scenario of BAPV and BIPV system for long-term projection energy demand in Yogyakarta, AIP Conference Proceedings  2097, 030090  Pertiwiningrum, A., Wuri, M.A., Widiharto, A., **Budiarto, R.** and Gozan, M., Heating Value Enhanchment by Biogas Purification Using Natural Zeolite and Rice Straw-Based Biochar, Intl. Jour. of GEOMATE, March, 2019 Vol.16, Issue 55, pp. 80 - 85  Salis, F.R., Pranadi, A.D., **Budiarto, R.**, Aliyah, F. and Novitasari, D., Comprehensive Education of RES in Rural Karst Area: Sustainable Development of Solar Water Pumping System in Banyumeneng Village, Yogyakarta, Indonesia, Intl. Jour. of Electrical Energy, Vol. 6, No. 2, December 2018, pp 74 - 78  Gozan, M., Aulawy, N., Rahman, S.F., **Budiarto, R**., Techno-Economic Analysis of Biogas Power Plant from POME (Palm Oil Mill Effluent), Intl. Jour. of Applied Eng. Research, Vol. 13, Number 8 (2018), pp. 6151-6157  Pertiwiningrum, A., Harto, A.W., Wuri, M.A. and **Budiarto, R.,** Assessment of Calorific Value of Biogas after Carbon Dioxide Adsorption Process Using Natural Zeolite and Biochar, Intl. Jour. of Env. Science and Dev., Vol. 9, No. 11, Nov 2018., pp. 327 - 330  Suhendri, Wahri Sunanda and **Budiarto, R**., Performance of Glazing Materials for Atrium in Hot and Humid Climate, ICEMP 2018, MATEC Web of Conferences 186, 02007 (2018)  Reztrie, N.D., Lubis, I.H., Kusuma, H.E., Koerniawan, M.D., **Budiarto, R**., Perception on Green Building Concept for Vertical Housing, Proc. Of 2018 2nd International Conference on Green Energy and Applications, Singapore  Handayani, T.P., Hulukati, S.A., Gusa, R.F., **Budiarto, R**., Development of a Hybrid Power Supply Control Prototype for Solar-Powered Water Tank Pumping System, Proc. Of 2018 2nd International Conference on Green Energy and Applications, Singapore  Wuri, M.A., Pertiwingrum, A., **Budiarto, R.,** Methane Enrichment of Biogas by Carbon Dioxide Adsorption on Natural Zeolite and Biochar Derived from Chicken Manure, Proc. Of The 9th International Graduate Students and Scholars' Conference in Indonesia, Yogyakarta  Wuri, M.A., Pertiwingrum, A., **Budiarto, R.,** Koranto, C.A.D., Characterization of Natural Zeolite and Chicken Manure Derived Biochar for Carbon Dioxide Adsorption in Biogas, Astechnova 2017, E3S Web of Conferences 43, 01008 (2018)  Indriani, S.N., Setiawan, A.A., **Budiarto, R.,** Demand Simulation for Water, Food Irrigation, and Energy from Micro Hydro Power Plant in Sungai Bayang, Bayang Utara, Pesisir Selatan West Sumatra, Astechnova 2017, E3S Web of Conferences 43, 01005 (2018)  Fariz Qashidi Putra, Dani Rifai, Kutut Suryopratomo and **Budiarto, R.,** Multilevel Diffuser Augmented for Horizontal Axis Wind Turbine, Astechnova 2016, E3S Web of Conferences 42, 01001 (2018)  Yollanda Z. Devi, Andang W. Harto, **Budiarto, R.** and Novi Trihastuti, Potential Analysis of Ex-Coal Mining Land As Pumped Storage Hydro Powerplant In Kutai Kartanegara, East Kalimantan, Astechnova 2016, E3S Web of Conferences 42, 01009 (2018)  Theodorus T. Wibowo, Faizal H. Daulay, Kutut Suryopratomo, and **Budiarto, R**., Numerical study of the effect of geometry variation on the performance of innovative design wind speed enhancer, Astechnova 2016, E3S Web of Conferences 42, 01013 (2018)  **Budiarto, R.**, Wardhana, A.R., and Prastowo, A., Implementation of Islamic Economics in Indonesia by Developing Green Economy through Renewable Energy Technologies, Proc. Of Gadjah Mada International Conference on Islamic Economics and Development, Universitas Gadjah Mada Indonesia  **Budiarto, R**., Indarto, Saptoadi, H., Sutrisno, and Sunarno, 2016, New Approach of Reliability Analysis on of High Entalphy Geothermal Powerplant, Proc. Basic Science, Univ Brawijaya, Malang, 2nd-3rd March 2016  Klug, F., Wicaksono, H. and **Budiarto, R.**, Energy modeling for an efficient system development in Indonesian Province Nusa Tenggara Timur (NTT), *Energy for Sustainable Development*, vol. 28 (2015), pp. 88–94  Anugrah, P., Setiawan, A.A., **Budiarto, R**., Sihana, Evaluating Micro Hydro Power Generation System under Climate Change Scenario in Bayang Catchment, Kabupaten Pesisir Selatan, West Sumatra, *Energy Procedia*, No. 65 ( 2015 ), pp. 257 – 263  **Budiarto, R**., Indarto, Saptoadi, H., Sutrisno, and Sunarno, Recent Development of Non-Conventional Geothermal Powerplant, *Proc. of the 3rd Applied Science for Tech. Innovation, ASTECHNOVA 2014*, Intl. Energy Conference, Yogyakarta  Megantoro, P., **Budiarto, R**., and Prabowo, I.E., Design of MPPT Based Microcontroller Using Algorithm of Constant Voltage and Perturb & Observ also Buck Converter with Fuzzy Control, *Proc. of the 3rd Applied Science for Tech. Innovation*, *ASTECHNOVA 2014*, Intl. Energy Conference, Yogyakarta  Na’imah, D.Y.N., **Budiarto, R**. and Harto, A.W., Conceptual Design of Centralized Biogas Power Plant (Case Study in Bantul, Yogyakarta, Indonesia), *Proc. of the 3rd Applied Science for Tech. Innovation, ASTECHNOVA 2014*, Intl. Energy Conference, Yogyakarta  Setiawan, A.A., Anugrah, P., and **Budiarto, R**., Assessment of Water Supply Potential to Generate Electricity as Micro Hydro Power Plant in Bayang Catchment, West Sumatra, *Proc. of 8th SEATUC Symposium*, UTM, Malaysia  **Budiarto, R**., Ridwan, M.K., Haryoko, A., Anwar, Y.S., Suhono, Suryopratomo, K., Sustainability Challenge for Small Scale Renewable Energy Use In Yogyakarta, *Procedia Environmental Sciences 17 (2013) 513 – 518 - Elsevier*  Putero, S.H., Rosita, W., Santosa, H.B. dan **Budiarto, R**., The Performance of Various Pozzolanic Materials in Improving Quality of Strontium Liquid Waste Cementation, *Procedia Environmental Sciences 17 (2013) 703 – 710 - Elsevier*  Perdamaian, L.G., **Budiarto, R**., Ridwan, M.K., Scenarios to Reduce Electricity Consumption and CO2 Emission of Terminal 3 Soekarno-Hatta International Airport, *Procedia Environmental Sciences 17 ( 2013 ) 576 – 585 - Elsevier*  **Budiarto, R**., Hawibowo, S., Wijaya, R., and Waruwu, M., Rancang Bangun Sistem Informasi Serta Pemantauan Kualitas Jalan dan Jembatan (Design on Monitoring and Management System for Road and Bridge Quality), Proc. Of Astechnova Seminar, Dept. Of Physics Eng., 2012, Yogyakarta  Virgiana, A.T., Utami, S.S., and **Budiarto, R**., Perhitungan Efisiensi Energi Green Building Menggunakan Simulator EQuest - Studi Kasus Rest Area Km 6 Tol Cikampek (Prediction on Energy Efficiency in Green Building Using Equest Simulator – Case Study of Rest Area Cikampek Toll Road), Proc. Of Astechnova Seminar, Dept. Of Physics Eng., 2012, Yogyakarta  Ali, H., Effendy, N. and **Budiarto, R**., Rancang Bangun Sistem Pengukuran Putaran Sudu Turbin dan Perekam Data Berbasis Mikrokontroler AVR ATMEGA16 pada Turbin Angin di Pantai Baru Ngentak Bantul (Design of Monitoring System on AVR-ATMEGA16-Microcontroller-Based Rotor Rotation and Data Recorder for Wind Turbine in New Beach Bantul), Proc. Of Astechnova Seminar, Dept. Of Physics Eng., 2012, Yogyakarta  Setiawan, A.A., Mulya, F.Z.T., Prabowo, I.E. and **Budiarto, R**., Development and Implementation of Solar Power System Unit for Disaster Response and Rural Area in Indonesia, Proc. of The 5th AUN/SEED-Net Regional Conf. on New/Renewable Energy, STE, HUST  Perdamaian, L.G., **Budiarto, R**., and Ridwan, M.K., Determining Energy Conservation Opportunities of Terminal 3 Soekarno - Hatta International Airport Using Energy Simulation Software, *Proc. of 2nd Intl. Conf. On Sustainable Built Environment*, Indonesia Islamic University, Yogyakarta  Sihana, Putero, H.S., Suryopratomo, K., **Budiarto, R**., Community Empowerment: Engineering Education Way in Gadjah Mada University to Elevate Nation Competitiveness and Innovation, *Proc. Of 2012 World Conf. on Continuing Eng. Education*, Intl. Assc. for Continuing Eng. Education (IACEE), Valencia  **Budiarto, R.** and Aliyah, F., Potensi Energi Limbah Usaha Mikro Kecil dan Menengah di Kecamatan Ngemplak dan Nogosari Boyolali Jawa Tengah (Waste Energy Potential of Small Medium Enterprise in Ngemplak and Nogosari District Boyolali Central Java), Jour. Of TEKNOFISIKA Vol. 1, No. 1, Mei 2012  **Budiarto, R**., Putero, S.H., Kusnanto dan Ferdiansjah, New Learning Approaches in Department of Engineering Physics Gadjah Mada University to Develop Energy Technopreneur in Green Economics Era, *Proc. Of SUSTAIN 2011*, Kyoto  Putero, S.H., dan **Budiarto, R**., Roles of New and Renewable Energy Engineering Education of Gadjah Mada University in Solving Energy Problems of Indonesia, *Proc. of AMSTECS 2011*, Tokyo  **Budiarto, R**., Putero, S.H., Kusnanto dan Ferdiansjah, Preparing Green Economics Trough Synergy Among Seven Courses in Engineering Physics Gadjah Mada University, *Proc. Of Intl. Seminar of APRCE*, Yogyakarta  Putero, S.H., Kusnanto dan **Budiarto, R**., Developing Technopreneurship for Engineering Physics Students of Gadjah Mada University, WCCEE 2010, Singapore  **Budiarto, R.,** Suryopratomo, K., Ahmad, Z.H., Tjojudo, H.D.K., dan Azana, C.P., Evaluasi Kinerja Biogas Digester: Contoh di Yogyakarta (Evaluation on Biogas Digester Performance: Cases in Yogyakarta), *Proc. of Seminar Basic Science VII*, Universitas Brawijaya, Malang  **Budiarto, R.,** Tenggara, A.P., Agung, A., Hanggoro dan Jayadi, R., Development of Integrated Hydro Powerplant Design Module, *Proc 1st Seminar on Applied Technology, Science and Art*, ITS - Surabaya  **Budiarto, R**. dan Putero, S.H., Kriteria Desain Bahan Bakar Terbarukan Bagi UMKM di DIY (Design Criteria of Renewable Fuel for SMEs in Yogyakarta), *Proc. of 1st Astechnova Nat. Seminar*, Dept. of Eng. Physics, Fac. of Eng., Gadjah Mada University  **Budiarto, R**., Financial Challenge in Increasing Hydropower Use in Indonesia, *Proc.* *of World Renewable Energy Regional Congress and Exhibition*, Jakarta  **Budiarto, R**., Suryopratomo, K., Prasetyo, A.S., Utami, S.S. dan Maryani, S., Perbandingan Kinerja Kincir Air Undershot Sudu Bergerak dan Tak Bergerak (Performance Comparison Between Moving and Fixed Blade Undershot Water Wheel), *Proc. of National Seminar on Mechanical Engineering and Its Application Support*, Universitas Trisakti, Jakarta  **Budiarto, R.**, Dukungan Komprehensif Bagi Penumbuhan Industri Energi Terbarukan Dalam Negeri (Comprehensive Support on Development of National Renewable Energy Industry), *Proc. of National Seminar on Development of Energy Policy, Management and Technology*, Bandung Instute of Technology  **Budiarto, R.** dan Agung, A., Potensi Energi Limbah Pabrik Kelapa Sawit (Energy from Palm Oil Industrial Waste), *Proc. of National Seminar on Basic Science VI*, Universitas Brawijaya, Malang  **Budiarto, R**., Agung, A. dan Putero, S.H., Audit Energi di Perguruan Tinggi di Daerah Istimewa Yogyakarta (Energy Audit in University in Yogyakarta Special Region), *Proc. of 7th National Scientific Meeting of Engineering Lecturer,* Tarumanegara University, Jakarta  **Budiarto, R**., Pendekatan Menyeluruh untuk Mendukung Pengembangan Pemanfaatan Energi Terbarukan (Comprehensive Approach in Supporting Renewable Energy Utilization Development), *Proc.9th Congress Of National Science, LIPI (Science Institute of Indonesia) – Dept. of National Education*, Jakarta  **Budiarto, R**, Bahaya Banjir di Tapak PLTN (Flood Hazard in Nuclear Power Plant Site), *Proc. of 12th National Seminar on Technology And Safety of Nuclear Power Plant and Nuclear Facility*, BATAN, Yogyakarta  **Budiarto, R**,Model Numeris Transformasi Gelombang(Numerical Model on Wave Transformation), Jour. of Media Teknik, XXII (2)  **Budiarto, R**, Nizam and Nur Yuwono, Longshore Current Profile over Barred-Profile Beach, *Proc., 11th Congress of The Asia and Pacific Division of IAHR*, Yogyakarta – Indonesia |

**Teaching Experience**

| Post Graduate  Magister of Technology for Sustainable Development, UGM  Magister of Engineering System, Fac. of Eng., UGM  Magister of Engineering Physics  Fac. of Eng., UGM  Magister of Industrial Safety Engineering, Fac. of Eng., UGM | :  :  :  : | System and Technology of Renewable Energy (2012 – 2013, 2016 - …)  Energy System (2016 - …)  System of Small and Medium Industry (2012 – 2014)  Introduction to Computer (2009 – 2010)  Hydro and Wind Energy (2017 - …)  Geothermal (2017 - …)  Engineering System (2009)  Ventilation (2006 – 2010)  Noise Control (2007) |
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| Under Graduate  Dept. of Sociology  Dept. of Architecture and Planning Eng., UGM  Dept. of Economics Science, Fac. Of Economics and Business  Dept. of Engineering Physics, Fac. of Eng., UGM | :  :  :  : | Energy Sociology (2019 - …)  Design of Energy System Development (2017 - …)  Energy Economics (2018 - …)  Livable City (2016 - …), Energy Convertion (2016 - …)  Fluid Mechanics (2016 - …), Engineering Economics (2014 - 2016), Integration of Renewable Energy (2012 – 2015),  Energy Conservation (2006 – ...), Energy Policy (2005 – 2012), Wind Energy (2005 – ...), Hydropower (2005 – ...),  Renewable Energy (2005 – ...), Concept of Technology (2005 – 2016), Energy Management (2006 – 2007),  Optimation of Power Generation (2009), Alternative Energy (2009), Engineering Mechanics (2009), Wave Phenomen (1998 – 1999), Physics I (1998 – 1999, 2007), Calculus I (1998 – 1999) |
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