

## I. Identitas Calon Promotor

Nama Lengkap : Dr.Ir.Edi Leksono, M.Eng  
Fakultas/Sekolah : Teknologi Industri  
Kelompok Keahlian : Teknik Fisika

## II. Evaluasi Calon Pembimbing

### Publikasi dan Paten dalam tiga tahun terakhir

H-index : 6, SINTA Score: 12.45

1. Irsyad N. Haq, Riza H. Saputra, Frans Edison, Deddy Kurniadi, Edi Leksono, Brian Yulianto, 2015, State of Charge (SOC) Estimation of LiFePO<sub>4</sub> Battery Module Using Support Vector Regression, **Proceedings of 3rd IEEE International Conference on Electrical Vehicular Technology (ICEVT-2015)**, Surakarta, Indonesia (will appear on November 2015)
2. Gunawan, Harijono A. Tjokronegoro, E. Leksono, Nugraha, 2015, Non-adiabatic Condition on the Natural Gas Energy Custody Transfer Using Orifice Flow Meter, **MAPAN Journal of Metrology Society of India**, Springer, DOI 10.1007/s12647-015-0132-6
3. Edi Leksono & Irsyad Nashirul Haq, Lithium Battery Management System for Electric Vehicle using Onewire Communication Protocol and State of Charge Estimation Method using Support Vector Regression, **Registered at Ministry of Law and Human Rights of the Republic of Indonesia, January 2016**, as part of National Electric Vehicle Research of ITB

### Hibah riset dalam tiga tahun terakhir

Judul Riset	Tahun Riset	Sumber Pendanaan Riset	Peran / Posisi
The Implementation Extension of Electrical Energy Information System for the Development of Energy Efficient Culture at ITB Campus Environment	2016	The Institute for Research and Community Services of ITB	Principal Investigator
Energy Supply System for National Electric Vehicle Project : Battery Management System, Prototype Development (One-Wire Protocol)	2014-2015	The Institute for Educational Fund Management (Ministry of Finance)	Principal Investigator
The Implementation of Electrical Energy Information System for the Development of Energy Efficient Culture at ITB Campus Environment	2014	The Institute for Research and Community Services of ITB	Principal Investigator
Energy Supply System for National Electric Vehicle Project : Battery Management System, Prototype Development (Hardwired)	2013	The Institute for Educational Fund Management (Ministry of Finance)	Principal Investigator

### Mahasiswa Program Doktor tiga tahun terakhir (sebagai Pembimbing maupun ko-pembimbing yang sesuai bidang keilmuannya)

No	Nama Mahasiswa	PT Asal S1	Tahun Masuk	Tahun Lulus	Predikat Lulus	# publikasi terkait riset doktor
1	Dr. Muh Ahmad Ary Murti	Universitas Telkom	2011	2017		

2	Irsyad Nashirul Haq, S.T.,M.T.		2013	-		
3	Yohanes SM Simamora,S.T.,M.T.			-		KONTROL AKTIF SURGE PADA KOMPRESOR SENTRIFUGAL MELALUI LINIERISASI KARAKTERISTIK DAN PEMBATALAN KOMPONEN NONLINIER MODEL
4	Danang Widjayanto,S.T.,M.T.	UGM	2017	-		
5	Muhammad Wildany, S.T.,M.T.	ITB	2018	-		

### III. Deskripsi Program

#### Judul I : Sistem Diagnosis, Deteksi, Prognosis, dan Analisis Kegagalan pada Sistem Baterai Penyimpan Energi

Peta Jalan Penelitian :

Years	2011 – 2015	2016-2020	2021 – 2025
<b>Market</b>	<i>Carbon Market, Audit Energy, Hybrid Renewable Energy System</i>	<i>Carbon Market, Audit Energy MicroGrid System, Electric Vehicle Infrastructure</i>	<i>Smart Grid, Intelligent Energy System</i>
<b>Product</b>	<i>Smart Metering, Cloud Energy Monitoring, Building Automation,</i>	<i>Advanced metering infrastructure. SCADA System, Smart Appliances, Internet of Things</i>	<i>Advanced metering infrastructure. SCADA System, Smart Appliances, Balance-of System Control</i>
<b>Technology</b>	<i>Cloud System Software, Communication Protocol, Wireless Sensor</i>	<i>Cloud System Software, Communication Protocol, Wireless Control, Balance-of System Control</i>	<i>Asset Management System Cloud System Software, Wireless Control</i>
<b>R &amp; D</b>	<i>On Grid inverter. Energy Meter Chip. Embedded Control, Balance-of System Control</i>	<i>On Grid inverter. Energy Meter Chip. Embedded Control,</i>	<i>Embedded Electricity Hardware System,</i>
<b>Resource</b>	<i>Investment</i>	<i>Supply Chain</i>	<i>Competence</i>

Indikator keberhasilan

No.	Indikator Keberhasilan	Deskripsi
1.	Keluaran ( <i>output</i> ) Hasil Riset	1. Paten Sistem Diagnosis, Deteksi, Prognosis, dan Analisis Kegagalan pada Sistem Baterai Penyimpan Energi 2. Jurnal Ilmiah Sistem Diagnosis, Deteksi, Prognosis, dan Analisis Kegagalan pada Sistem Baterai Penyimpan Energi 3. Prototipe Sistem Diagnosis, Deteksi, Prognosis, dan Analisis Kegagalan pada Sistem Baterai Penyimpan Energi
2.	Dampak ( <i>outcome</i> ) Hasil Riset	1. Terciptaanya perubahan positif pada perilaku penggunaan baterai di masyarakat 2. Aplikasi Sistem Manajemen Baterai Cerdas pada kendaraan listrik secara luas
3.	Presentasi pada <i>international conference</i>	Presentasi prosiding pada <i>conference</i> bidang energi terbarukan.
4.	Networking nasional dan internasional	Terciptanya kerja sama penelitian dan implementasi riset ini dengan kampus lain, industri kendaraan listrik, dan perusahaan energi terbarukan.