



1. Personal Data	
Name: Edwan Kardena	Date and Place of Birth: December 9 th , 1962, Garut – Indonesia
Nationality: Indonesia	Gender: Male
Department, faculty, university: Environmental Engineering Department, Faculty of Civil & Environmental Engineering, Institut Teknologi Bandung	
Title of position held: Assoc. Prof.	Address: Jl. Tamansari No. 64, Bandung
Tel. +62 22 2502647 Fax. +62 22 2530704	

2. Educational Qualifications				
2-1. Academic Qualification (Repeat as necessary)				
<ul style="list-style-type: none"> • Bachelor Degree of Environmental Engineering from ITB, graduated in March 1988 • PhD in Environmental Microbiology, from University of Cardiff, UK, October 1995 • Post-Doctoral research Fellow at Univ of New South Wales, Australia, Nov 1996, Funded by Directorate General of Higher Education, Indonesia • Post-Doctoral research fellow at Hokkaido University, Japan, March 1997, funded by JSPS • Post-Doctoral research fellow at University of Kent at Canterbury, Mei 1998-July 1998, funded by DFID, British Government 				
2-2. Academic Experience				
<ul style="list-style-type: none"> • Assoc. Professor at Environmental Engineering, Full Time 				
2-3. Non Academic Experience				
Company or Entity	Title	Brief Description of Position	Year	Full/ Part Time
PT. LAPI and LAPI Institute	Environmental Engineer			Part Time
2-4. Certification or Professional Registrations				
Certified Lecturer in Higher Education from the Indonesian Ministry of Research, Technology, and Higher Education				

2-5. Current Membership in Professional Organizations

- Asean European University Network (ASEA-UNINET).
- Position: Indonesian Coordinator since 2005.
- Asean University Network (AUN) position: ITB contact person since 2006.
- Indonesian Society of Sanitary and Environmental Engineers, member
- Indonesian Society of Microbiology, member

2-6. Honors and Awards

Satya Lancana Karya Satya, from President of Republik of Indonesia

2-7. Service activities:

Director of Partnership and International Relations, ITB

2-8. Research Experience

Number of years of experience in the field related to the project:

28 years

Field of specialization:

Biodegradation of toxic organic chemicals and its application in water and soil

2-9. Research Achievements

List of Major Publications within 5 years:

- Nugroho, A., **Kardena, E.**, Astuti, D.I. and Kania, D. (2015): “Preliminary Study on Climate Change Biomitigation by Improving CO₂ Removal and CO₂ Utilization Efficiency using Microalgae Culture in Photobioreactor”, *Applied Mechanics and Materials*, Vol. **747** (2015) pp 261-264.
- Helmy, Q. and **Kardena, E.** (2015): “Petroleum Oil and Gas Industry Waste Treatment; Common Practice in Indonesia”, *Journal of Petroleum & Environmental Biotechnology*, **6**:241.
- Helmy, Q., Laksmono, R. and **Kardena, E.** (2015): “Bioremediation of Aged Petroleum Oil Contaminated Soil : From Laboratory Scale to Full Scale Application”, *Journal Procedia Chemistry*, Vol. **14**: 326-333.
- Edwan **Kardena**, Luhur Akbar Devianto, Kurniasih, Herto Dwi Ariesyady, Aminudin Sulaeman, “Biosorption and Desorption of Chromium from Immobilized Microalgae Biosorbent”, The 5th Environmental Technology and Management Conference “Green Technology towards Sustainable Environment” November 23 - 24, 2015, Bandung, Indonesia.
- **Kardena, E.**, Helmy, Q and Funamizu, N. (2014): Biosurfactant and Soil Bioremediation. Book Chapter in *Biosurfactants: Production and Utilization - Processes, Technologies, and Economics*, CRC Press -Taylor & Francis Group.
- Astri Rinanti, **Edwan Kardena**, Dea Indriani Astuti, Kania Dewi. (2014): Carbon dioxide Fixation by Co-culture Green Microalgae through Overall Volumetric Mass Transfer Coefficient (K_{La}) of Carbon Dioxide in Closed System. *Asian Journal of Microbiology, Biotechnology & Environmental Science*, Vol **16** No.2 (2014), p 253-258
- Astri Rinanti, **Edwan Kardena**, Dea Indriani Astuti, Kania Dewi. (2014): Biotechnology Carbon Capture and Storage (CCS) by Mix-culture Green Microalgeto Enhancing CO₂ Uptake Rate and CO₂ Removal Efficiency with Different Aeration Rates in Closed System Photobioreactor. *Jurnal Teknologi - UTM*. Accepted to be published Oct, 2014
- Astri Rinanti, Edwan Kardena, Dea Indriani Astuti, Kania Dewi. (2014): Improvement of carbon dioxide removal through artificial light intensity and temperature by constructed green microalgae consortium in a vertical bubble column photobioreactor. *Malaysian Journal of Microbiology* Vol.**10** No.1 (2014): 29-37.
- Helmy, Q., **Kardena, E.**, Funamizu, N dan Wisjnuaprpto. (2011): Strategies toward Commercial Scale of Biosurfactant Production as Potential Substitute for It’s Chemically Counterparts. *International Journal of Biotechnology*, Vol. **12** (1/2): 66-86, indexed by Scopus and Google Scholar

Other relevant information:**Latest Professional Activities:**

- Environmental Engineer on evaluation of Leachate Treatment PT Freeport
- Expert in the design of several waste/produced water treatment plants including for PT Keris Mas Witicko Makmur, Tempeh Industry in Bekasi
- Cyanide degradation in tailing water of PT Aneka Tambang
- Bioleaching Process for Gold Recovery in PT Aneka Tambang