

RIWAYAT HIDUP

Nama : Kamaruddin Abdullah
NIP. : 130676733
Pangkat/ Golongan : Pembina Tingkat I, IV/b.
Tempat/tgl. Lahir : Sumbawa Besar/10 September 1942
Agama : Islam
Unit Kerja : Fakultas Teknologi Pertanian, IPB
Status : Menikah dengan Silvia Widiyanti H.
dikaruniai tiga orang anak, yaitu:
Nurhanna Fujiko, Ghazali, dan
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Pendidikan :

1. Sarjana (Nogakushi), Teknik Pertanian, Tokyo University of Agriculture and Technology (Tokyo Noko Dai), 1967.
2. MS (Nogaku shushi), Teknik Pertanian (Tokyo Noko Dai), 1970
3. Dr (Nogaku Hakushi), Teknik Pertanian, Univ. of Tokyo, 1976

Riwayat Pekerjaan :

- 1. Dosen Teknik Pengolahan Hasil Pertanian, Jurusan Teknik Pertanian Fateta, IPB, 1977.**
- 2. Kepala, Laboratorium Energi dan Elektrifikasi Pertanian, Jurusan Teknik Pertanian, Fateta, IPB, 1980.**
- 3. Kepala, Pusat Pengkajian dan Penerapan Ilmu Teknik untuk Pertanian Tropika (CREATA)- Lembaga Penelitian-IPB, 1994**
- 4. Pembantu Dekan II, Fakultas Pascasarjana IPB, 1978-1983.**
- 5. Pembantu Dekan I Fakultas Pascasarjana IPB, 1983-1986**
- 6. Asisten Direktur Program Pascasarjana IPB, 1986- sekarang**

Perkuliahhan

- 1. Energi dan Elektrifikasi Pertanian pada program sarjana Jurusan Teknik Pertanian, Fakultas Teknologi Pertanian, IPB.**
- 2. Energi Alternatif pada program sarjana Jurusan Teknik Pertanian Fakultas Teknologi Pertanian, IPB**
- 3. Matematika Terapan pada program studi Ilmu Keteknikan Pertanian Program Pascasarjana, IPB dan pada program sarjana Jurusan Teknik Pertanian, Fakultas Teknologi Pertanian, IPB.**

4. **Transport Fenomena pada program studi Ilmu Keteknikan Pertanian Program Pascasarjana, IPB.**
5. **Tenaga Mesin Pertanian dan Energi Alternatip pada program studi Ilmu Keteknikam Pertanian Program Pasca-sarjana, IPB.**
6. **Teknologi konversi energi surya pada program studi Ilmu Keteknikan Pertanian Program Pascasarjana, IPB.**
7. **Sifat termofisik hasil pertanian pada program studi Ilmu Keteknikan Pertanian Program Pascasarjana, IPB.**

Pembimbingan Mahasiswa

1. **Telah berhasil membimbing lebih dari 50 orang orang sarjana ditambah 2 sarjana Teknik Mesin UI dan masih membimbing 10 Sarjana.**
2. **Telah berhasil membimbing 17 Magister Sains, 1 dari Tokyo University of Agriculture and Technology, Jepang dan masih membimbing 2 orang peserta program S2**
3. **Telah berhasil membimbing 11 Dr dan masih membimbing 4 mahasiswa, 2 dari Universitas Stuttgart Jerman.**
4. **Memeriksa tesis MS Teknik Mesin, International Development Technologies Center dari University of Melbourne Australia**

Penghargaan

1. Dosen Teladan tingkat IPB, 1986
2. Adigrahitita, Fateta, IPB, 1995
3. Certificate of Appreciation, SAEDA, Jepang: "in recognising of the valuable contributions made in the promotion of agricultural reserach and cooperation in the Asian region".

Keanggotaan Organisasi Profesi dan Panitia/Badan :

- 1979-1986 : Ketua Tim Energi, IPB
- 1979- : Anggota Panitia Teknis Sumber Daya Energi (PTE), Departemen Pertambangan dan Energi.
- 1978-1995 : Kordinator, DGHE-JSPS (Japan Society for the Promotion of Sciences)
- 1989- : Anggota, American Society of Agricultural Engineers (ASAE)
- 1993- : Anggota, Asian Association of Agricultural Engineering (AAAE)
- 1989-1994 : Ketua, PERTETA Perhimpunan Teknik Pertanian
- 1991- : Angota, Club of Bologna, Italia
- 1994- : Anggota, International Advisory Committee, International Energy Foundation, Canada
- 1995- : Anggota, Advisory Panel, International Drying Symposium (IDS)

- 1992- : Anggota, International Program Committee
Global Warming, International Conference,
GWIC, USA.
- 1995- : Anggota Editor, Food Science and Technolo-
gy, International (FSTI)
- 1995- : Anggota, Majelis Penilai BK-Mesin, PII
- 1994- : Wakil Presiden (ISSAAS) International Socie-
ty of Southeast Asian Agricultural Sciences.
- 1995- : Anggota, Komite Nasional Indonesia, KNI-
World Energy Conference (WEC)

Kegiatan Riset/Seminar :

a. Internasional:

1. Kamaruddin A.: "Biomass Availability and Bioenergy Pro-
gram as Related to its Environmental Impact", Proc. Solar
'88, MIT, June, 1988.
2. Kamaruddin Abdullah: " Rural Energy Development in
Indonesia", Meeting of the International Energy Work-
shop, IIASA, 20-22 June, 1989, IIASA, Laxenburg,
Austria.
3. Kamaruddin A., and O.Kitani: "Alternative Energy Re-
sources for Agriculture", Nodai Research Institute,
DGHE-JSPS Program, Jan. 1988.

4. Kamaruddin A.: Estimation of Forest Change in Indonesia", International Seminar on Global Warming, Chicago, 9-12 April 1990.
5. Kamaruddin Abdullah : "Biomass Energy Planning and Development in Indonesia ", 2nd Science and Technology Week, Jan.30-Feb.4,1989, Manila.
6. Kamaruddin A. and L.I. Nasoetion: " Agricultural Production Model for ASEAN", 1st ISACDESA, Nov. 20 -24, 1989.
7. Kamaruddin A. and Brauwer: " Experiments and simulation results on thermal performance of a solar tea dryer ini Indonesia" Solar '91. Denver, USA, 1992.
8. Kamaruddin A.: "Rice Production Model for Indonesia", 2nd International Seminar on Agricultural Change and Development in Southeast Asia. Phuket, Thailand, November 19-23, 1990.
9. Kimar T, Kamaruddin A., Soedarsono, Tjarinto,: "Electric generation using centrifugal pump", JICA-IPB 5th Joint Seminar as an International Conference On Engineering Applications for the Development of Agriculture in the Asia and Pacific Region. Bogor, October 12-15, 1992.

10. Samsuri T., Kamaruddin A., Y. Sagara, : "Drying Simulation of Shredded Tobacco Leaves Using LPB and Solar Energy". JICA-IPB 5th Joint Seminar as an International Conference On Engineering Applications for the Development of Agriculture in the Asia and Pacific Region. Bogor, October 12-15, 1992.

11. Kamaruddin A. and Y. Sagara, 1992: "Thermophysical Properties of Tropical Agricultural Products", paper No. 926066. International Summer Meeting of the ASAE, Charlotte, USA.

12. Kamaruddin A., A. Kohar Irwanto and I. Nishimura. " Indonesian energy need for sustainable development", International Conference on Engineering Applications for the Development of Agriculture in the Asia and Pacific Region, Bogor, Oct. 12-15, 1992.

13. Kimar T., Kamaruddin A., Tineke M, Sudarsono and Tjarinto: "Electric Generation Using Centrifugal Pump", *ibid.*

14. Kamaruddin A.: "System Optimization in Solar Drying", The 5th International Energy Conference, ENERGEX'93. Seoul Oct. 18-22, 1993.

15. Kamaruddin A. et al. "Drying of Black Pepper Using Solar Energy", IDS'94, Gold Coast, Australia., August 1-4, 1994.
16. Kamaruddin A., Tamrin, F. Wenur and Dyah W.: "Heat and Mass Transfer in Fiberglass House Dryer", International Conference on Fluid and Thermal Energy Conversion'94", FTEC'94. Dec.12-15,1994, Denpasar, Bali, Indonesia.
17. Kamaruddin A. and I. Taruna: " Performance of Renor MP II Flat Plate Solar Collector for the Drying of Cloves and Black Pepper", XII, CIGR and AgEng'94 Conference on Agricultural Engineering, August 29-Sept.1, 1994, Milan, Italy.
18. Kamaruddin A.: " Research and Development of Solar Drying as Innovative Technology", International Seminar on Experiences in Sustainable Agriculture in Southeast Asia: Innovative Approach to Sustainable Agriculture (ESA-III'94), Khon Kaen, Nov. 9-12, Thailand.
19. Kamaruddin A., Tamrin, Oskari A, and Sri Mulato: " Transparent Fiberglass House Solar Dryer for Coffee Drying", ASIC'95, 16th International Conference on Coffee Science, April 9-14, 1995, Kyoto, Japan.

20. Kamaruddin A. et al: Drying performance of transparent fiberglass house solar dryer, International symposium on Energy, environment and economics, The University of Melbourne, 20-24 Nov. 1995.
21. Kamaruddin A. and A. Kohar Irwanto, 1966: Technology selection using multisttribute model for rice production in Indonesia. 7th Global warming conference, 1-4, April, Vienna, Austria.
22. Kamaruddin A. and I. Nishimura, 1996: Research on Cooling System Using Renewable Sources in Indonesia. Proc. Asia-Pacific Conference on Sustainable Energy and Environmental Technology, Singapore, June 19-21.
23. Kamaruddin A., 1996: Drying of vanilla pods using GHE solar dryer. Proc. The 6th Int. Energy Conference and Exhibition -ENERGEX'96, June 3-7. Beijing. China.
24. Kamaruddin A., 1996: Solar cooling for tropical fruits and vegetables. ENERGEX'96. *ibid.*

b. Regional/ASEAN :

1. Kamaruddin Abdullah : "Biomass Energy Planning and Development in Indonesia ", 2nd Science and Technology Week, Jan.30- Feb.4, 1989, Manila.

2. Kamaruddin A. and L.I. Nasoetion: "Agricultural Production Model for ASEAN", 1st ISACDESA, Nov. 20 -24, 1989.
3. Kamaruddin A.: "Post harvest flow distribution of rough rice and maize in Kediri, Indonesia, 11th Annual ASEAN Technical Seminar on Post Harvest Technology. Kuala-lumpur, August 23-26,1988.
4. Kamaruddin A.: "Simple Computer Programming for Optimization of Solar Drying of Grains", ASEAN Grain Post Harvest Technology,Phuket, Thailand, Aug., 1993.
5. Kamaruddin A.: "Utilization of Heat Gasifier for Drying of Agricultural Product", paper presented in the 5th ASEAN Expert Group Meeting on New and Renewable Energy (NRSE), Jogjakarta, 10-14 May 1993.
6. Kamaruddin A. and M. Syaiful.: "Development of Solar Powered Jet Cooling Machine", The 5th ASEAN Conference on Energy Technology, 25-27 April 1994, Bangkok, Thailand.
7. Kamaruddin A., Tamrin, F. Wenur and Iwan T.: " Performance of Renor MP II Flat Plate Collector to Dry Clove and Black Pepper", The 5th ASEAN Conference on

Energy Technology, 25-27 April 1994, Bangkok, Thailand.

8. Kamaruddin A.: " Optimization and Simulation of Solar Drying System", Workshop on ASEAN-Canada Project on Solar Energy in Drying Process: Construction and Commissioning, Bandung, Indonesia, 10-12 October, 1995.

c. Nasional :

1. Kamaruddin A.: " Availability of Biomass as Energy Resources", Proc. National Workshop on Recent Biomass Development in Indonesia, Directorate General of Electric Power and New Energy-UNESCO, Jakarta, 1988.
2. Kamaruddin Abdullah: " Peranan Keteknikan Pertanian untuk Usaha Swasembada Beras dalam Pelita V", (Role of Agricultural Engineering in maintaining rice selfsufficiency in the 5th five year economic development plan). Seminar dan Kongres Perteta, Malang, Jan. 1989.
3. A. Kohar Irwanto, Kamaruddin Abdullah dkk.: "Pola Aliran Energi untuk Produksi Beras di Lampung", (Energy flow in rice production in Lampung) Seminar dan Kongres Perteta, Malang, Jan. 1989.

4. Kamaruddin Abullah dkk.: "Thermal diffusivities of tropical products and their relation to the development of solar cooling machines", 2nd Joint Seminar on Agricultural Engineering and Technology, JICA-IPB, 7-8, August, 1989.
5. Samsuri T., Kamaruddin A. et.al.: "Performance of shredded tobacco dryer with dual energy sources", 2nd Joint Seminar on Agricultural Engineering and Technology, JICA-IPB, 7-8 August, 1989.
6. Frans Wenur, Yasuyuki Sagara, Kamaruddin A., Atjeng M.Sjarief and Moeljarno, D.: "Freeze drying characteristics and transport properties of shrimp meat", *ibid.*
7. Samsuri T. dan Kamaruddin A.: "Pengeringan tembakau rajangan dengan energi ganda", Lokakarya Penelitian Balai Penelitian Tanaman Industri, Caringin, July, 1989.
8. Kamaruddin A.: " Biomassa Sebagai Sumber Energi di Indonesia", Temu Karya Peringatan Seratus Tahun Usaha Pertambangan Minyak dan Gas Bumi di Indonesia, Jakarta, October, 1985.

9. Kamaruddin A., et al: "Penelitian Survey Konsumsi Sumberdaya Energi Biomassa di Pulau Jawa", (Survey of biomass energy consumption in Java).
Kerjasama Direktorat Jenderal Listrik dan Energi Baru dan Tim Energi, Lembaga Penelitian, IPB, 1987.
10. Kamaruddin A., et al: " Computer Aided Technological Assesment of Biomass as Energy Resources", Energy Team, IPB, 1987.
11. Kamaruddin A., et al : "Penggunaan Komputer dalam Pengembangan Analisa Energi untuk Produksi Beras di Indonesia", Tim Energi, IPB, 1987.
12. Kamaruddin A., et al.: " Energy and Agriculture in Indonesia", Proc. Seminar on Alternative Energy Application in Agriculture. UNESCO, Thailand, Oct., 1986.
13. Kamaruddin A.: "Biomass as Energy Resources for Rural Household", Proc. Seminar on Rural Household Energy Conservation, FAO-IPB, Bogor, 1984.
14. Kamaruddin A., et al: "Proyek Pengembangan dan Peraan Pemanfaatan Limbah Pertanian Sebagai Sumber Energi", (Pilot project for utilization of agricultural waste as energy sources). Kerjasama antara Direktorat Jenderal

Ketenagaan, Departemen Pertambangan dan Energi, dan IPB, 1983.

15. Kamaruddin A.,: "Supply-Demand Model for Biomass Energy", Proc. Workshop on Green Energy for Regional Development, JSPS-DGHE, Bogor, Sept. 1982.
16. Kamaruddin A., Y.Sagara, Edi Hartulistiyoso and Aris Purwanto : " Thermophysical properties of agricultural product as related to solar cooling", Proc. Sem. Proj. ADAET, Fateta, Mar.1990.
17. Kamaruddin A. ,Edi Hartulistiyoso dan Aris Purwanto: " Pendinginan Sistem Jet-Uap dengan Menggunakan Energi Surya", Seminar LP-IPB, 16 June, 1990.
18. Kamaruddin A.:"Penerapan PDT untuk pemodelan masalah lingkungan", Seminar Matematika dan Lingkungan Hidup, FMIPA, IPB, Bogor, 30 May, 1990.
19. Kamaruddin A.:"Pengalaman mengajar matematika terapan di FPS-IPB", Seminar Nasional Penelitian Pendidikan MIPA, Surabaya, 9-11 July, 1990.
20. Kamaruddin A.:" Energy Technology for Agriculture and Rural Development ", Proc. 1st, Joint Seminar on Agricul-

tural Engineering and Technology, July 13-14, 1988, IPB, Bogor.

- 21. Kamaruddin A., Sri Endah A., Tamrin, F. Wenur dan Dyah W.: "Optimasi Dalam Perancangan Alat Pengering Hasil Pertanian Dengan Energi Surya-Uji Lapangan Sistem Pengering Energi Surya", Pertemuan Pemantauan Hasil Penelitian Hibah Bersaing I/3, II/2 dan III/1, Sawangan, Bogor, 11-15 January, 1995.**
- 22. Kamaruddin A. dan Sumardi H.S.: "Model Konduktivitas Panas Berdasarkan Komponen Bahan Penyusun", Seminar Tahunan Perkembangan Penelitian Teknik Pertanian, Bogor 13-14 March 1995.**
- 23. Tamrin dan Kamaruddin A.: "Simulasi Perpindahan Energi dan Massa Di Dalam Sistem PESRKT", Seminar Tahunan Perkembangan Penelitian Teknik Pertanian, Bogor 13-14 March 1995.**
- 24. Sumardi, H.S. dan Kamaruddin A.: "Simulasi Perubahan Suhu dalam Produk Pada Proses Pendinginan", Seminar Tahunan Perkembangan Penelitian Teknik Pertanian, Bogor 13-14 March 1995.**

25. Kamaruddin A., Sri Endah A., Tamrin, F. Wenur dan Dyah W.: "Pengembangan Sistem Pengering Energi Surya Tipe Rumah Kacaserat Transparan (RKT). Seminar Tahunan Perkembangan Penelitian Teknik Pertanian, Bogor 13-14 March, 1995.
26. Kamaruddin A.: "Pengembangan Sistem Pendinginan Produk Pertanian", Temu Karya Profesi dalam rangka 50 Tahun RI, Kerjasama BKM PII, Puslit-UI Pranata Sains dan Teknologi serta Jurusan Teknik Mesin FT UI, Jakarta, 28 March 1995.
27. Kamaruddin A. dan Mursalim: Penerapan Pengering Tenaga Surya Efek Rumah Kaca untuk Pengeringan Vanilli, Prosidings, Lokakarya Teknologi Tepat Guna Energi Non-konvensional untuk Pembangunan di Indonesia. Penyunting, Moch. Arifin B, dkk. Pusat Penelitian dan Pengembangan Fisika Terapan, LIPI, Pusat Penelitian dan Pengembangan Tenaga Listrik dan Mekatronik-LIPI, Biro Kerjasama IPTEK-LIPI, Bandung 18-19, December, 1995.
28. Kamaruddin A., dkk.: Penerapan Sistem Pengering Energi Surya dengan Efek Rumah Kaca Untuk Pengeringan Benih, Lokakarya Energi 1995, World Energy Council, Komite Nasional Indonesia, Jakarta 25-27 July, 1995.

Publikasi/ buku/manual/Jurnal :

Buku:

- 1. Kamaruddin Abdullah, M.Azron Dhalhar dan K. Fujii:
"Matematika Terapan", (Applied Mathematics) JICA-
DGHE-IPB Project ADAET:JTA-9a(132), 1990.**
- 2. Kamaruddin Abdullah, Atjeng M. Sjarief dan Aman Wira
kartakusuma: "Transpor Energi Dan Massa dalam Pengo-
lahan Pangan", (Energy and Mass Transport in Food
Processing) Proyek IMD, Bank Dunia XVII, 1990.**
- 3. Kamaruddin A., dkk.:"Energi dan Listrik Pertanian",
(Energy and Agricultural Electrification) JICA-DGHE-
IPB Project ADAET: JTA-9a(132), 1990.**
- 4. Kamaruddin A.,M.Azron,D. Usman Effendi dan
T.Iida."Perpindahan Momentum", (Momentum
Transfer).JICA-DGHE-IPB Project ADAET: JTA-9a(132),
1992.**
- 5. Kamaruddin A. and Osamu Kitani:"Alternative Energy for
Agriculture, Nodai Research Institute,1988.**

6. Kamaruddin A. :Composite System of Biomass and Natural Energy, in Biomass Handbook by Osamu Kitani and Carl W. Hall, Gordon and Breach Science Publishers, 1989.
7. Kamaruddin A and Y. Sagara. "Thermophysical Properties of Tropical Agricultural Products" in F. Ai Edited. Engineering for Biological Production Systems, Tokyo University of Agriculture and Technology, Japan, 1993.
8. M. Aman Wirakartakusumah, Kamaruddin A. and M. Atjeng Syarief. "Sifat Fisik Pangan". (Physical Properties of Foods). PAU Pangan dan Gizi, IPB, 1992. IBRD Loan No.2547-Ind.
9. Kamaruddin A. and Isao Nisimura : "Research on cooling system using renewable energy sources in Indonesia". Proc. of the Asia-Pacific Conference on Sustainable Energy and Environmental Technology. Edited by. P.F. Greenfield, C.Y. Liu, J.H. Tay, C.Q. Lu, A.C. Lun and K.C. Toh, Singapore, 1996. World Scientific.

Manual:

1. Kamaruddin A. dkk.:" Penuntun Praktikum Energi dan Listrik Pertanian", (Laboratory Manual for Energy and Agricultural Electrification) JICA-DGHE-IPB Project ADAET 9a(132).

Jurnal:

1. Kamaruddin A.: "Sifat sifat viskoelastis dari hasil-hasil pertanian dalam hubungannya dengan isolasi kejut dan getaran selama pengangkutan", *Keteknikan Pertanian*, No.2, Nov. 1987.
2. Maria Gabriel H., Kamaruddin A. dan M. Yamin: "Difusivitas panas buah semangka (*Citrullus Vulgaris* Schrad)". *Keteknikan Pertanian*, No. 2, Nov. 1987.
3. Kamaruddin A. dan Y. Aris Purwanto: " Penentuan Difusivitas Panas Buah-buahan Tropis", *J. Keteknikan Pertanian*, Vol.3, No.1, 1993.
4. Kamaruddin A.: " Estimation of Forest Area Change in Indonesia", *World Resource Review*, Vol.1, No.2, 1991.
5. Kamaruddin A.: " Rural energy development in Indonesia", *Indonesian Journal of Tropical Agriculture*, Vol 2(2), 1991.
6. Kamaruddin A.: "Drying of Vanilla Pods Using a Greenhouse Effect Solar Dryer", *Drying Technology*, an Int. Journal, To be published in Vol.15, No. 3 or 4.

Kegiatan Lain :

- a. **Chairman of the Organizing Committee of the Regional Seminar on Farm Mechanization in South East Asia, Jakarta 1981.**
- b. **Chairman of the Organizing Committee of the DGHE-JSPS Seminar on Green Energy for Regional Development, Bogor, 1982.**
- c. **Chairman of the Organizing Committee of International Seminar on Comparative Agricultural Studies in South East Asia, Denpassar, Bali, 1986.**
- d. **Steering Committee, JSPS-DGHE Seminar on The Development of Tropical Resources and the Effective Utilization of Energy in Agriculture, UGM, Jogja, 1985.**
- e. **Keynote Speaker in the International Seminar on Agricultural Mechanization, U.Tokyo, Japan, April, 1987.**
- f. **Member of Board of Editors of a Book on the Comparative Agricultural Studies in South East Asia, 1986.**

- g. Chairman of Session in Energex'93, (5th International Energy Conference) Seoul, October 1993.
- h. Chairman of Session in the 2nd Science and Technology Week, Manila, Jan.1989.
- i. Chairman of Session in the AGEng '94 Conference on Agricultural Engineering, Milano, Italy 29 August-1 September 1994.
- j. Chairman of Session in the ESA-III'94 International Seminar, Khon Kaen, Thailand, Nov.9-12, 1994.
- k. Chairman of Session in the FTEC'94 International Seminar, Denpasar, Bali, Dec. 12-15, 1994.

