

Curriculum Vitae

Name-Surname (in Thai) : เกศรินทร์ พิมรรักษา

(in English) : Kedsarin Pimraksa

Gender : Female

Current Position : Assistant Professor

Office address : Department of Industrial Chemistry, Faculty of Science,
Chiang Mai University, Muang, Chiang Mai 50200, Thailand

Tel : (053) 943405 (Office), 081-9506645 (Mobile) **Fax** : (053) 892262

E-mail address : kpimraksa@hotmail.com, kedsarin.p@cmu.ac.th

Educational background

Bachelor's degree : Industrial Chemistry (Silicate Science and Technology)

Institute : Chiang Mai University, 1997

Master's degree : Materials Science (Ceramic Technology)

Institute : Chulalongkorn University, 1999

Doctor's degree : Ph.D. (Chemical Technology of Inorganic Materials)

Institute : Vienna University of Technology, Austria, 2003

Research Interest

Cementitious material, Inorganic binder, Geopolymer, Zeolites, Green material chemistry

Training

1. Institute for Multidisciplinary Research of Advanced Materials, Tohoku University, Sendai, Japan: 15 January-31 July 2011
2. Institute of Manufacturing and Infrastructure Technology, The Commonwealth Scientific and Industrial Research Organization (CSIRO), Melbourne, Australia: 15 May-10 June 2008
3. Department of Mineralogy and Petrology, Vienna University, Vienna, Austria: 1 February-30 March 2006

Research papers

- 1) P. Chindapasirt, K. Pimraksa*, (2008), A Study on Lime-Fly Ash Granule Unfired Bricks, Powder Technology, 182, 33-41.
- 2) K. Pimraksa*, P. Chindapasirt, (2009), Lightweight bricks made of diatomaceous earth, lime and gypsum, Ceramics International, 35, 417-478.
- 3) K. Pimraksa*, S. Hanjitsuwan, P. Chindapasirt, (2009), Synthesis of belite cement from lignite fly ash, Ceramics International, 35, 2415-2425.
- 4) A. Sathonsaowaphak, P. Chindapasirt*, K. Pimraksa. (2009), Workability and strength of lignite bottom ash geopolymer mortar, Journal of Hazardous Materials, 168, 44-50.
- 5) T. Nochaiya, W. Wongkeo, K. Pimraksa, A. Chaipanich*, (2010), Microstructural, physical, and thermal analyses of Portland cement–fly ash–calcium hydroxide blended pastes, Journal of Thermal and Analytic Calorimetry, 100(1), 101-108.
- 6) K Pimraksa*, P. Chindapasirt, N. Setthaya, (2010), Synthesis of zeolite phases from coal combustion by-products, Waste Management & Research, 31(7), 1122-1132.
- 7) P. Chindapasirt, K. Boonserm, T. Chairuangsi, W. Vichit-Vadakan, T. Eaimsin, T. Sato, K. Pimraksa*, (2011), Plaster materials from waste calcium sulfate containing chemicals, organic fibers and inorganic waste additives, Construction and Building Materials, 25, 3193-3203.
- 8) K. Pimraksa*, P. Chindapasirt, T. Lertkhositpong, K. Sagoe-Crentsil, T. Sato, (2011), Lightweight geopolymeric materials from highly siliceous materials, Materials Science and Engineering A, 528, 6616-6623.
- 9) C. Ridtirud, P. Chindapasirt*, K. Pimraksa, (2011), Factors affecting the shrinkage of fly ash geopolymers, International Journal of Minerals, Metallurgy and Materials, 18, 100-104.
- 10) S. Hanjitsuwan, P. Chindapasirt*, K. Pimraksa, (2011), Electrical conductivity and dielectrical property of fly ash geopolymer pastes, International Journal of Minerals, Metallurgy and Materials, 18, 94-99.
- 11) W. Wongkeo, P. Thongsanitgarn, K. Pimraksa, A. Chaipanich*, (2012), Compressive strength, flexural strength and thermal conductivity of autoclaved concrete block made using bottom ash as cement replacement materials, Journal of Materials Design, 35, 434-439.
- 12) K. Boonserm, V. Sata, K. Pimraksa, P. Chindapasirt*, (2012), Improved geopolymerization of bottom ash by incorporating fly ash and using waste gypsum as additive, Cement and Concrete Composites, 34, 819-824.

- 13) K. Boonserm, V. Sata, K. Pimraksa, P. Chindapasirt*, (2012), Microstructure and strength of blended FBC-PCC fly ash geopolymer containing gypsum as an additive, *Science Asia*, 38, 175-181 (2012).
- 14) P. Thuadaj, K. Pimraksa, A. Nuntiya*, (2012), Synthesis of high cation exchange capacity faujasite from high calcium fly ash, *Australian Journal of Basic and Applied Sciences*, 6 (10), 194-208.
- 15) K. Pimraksa*, P. Chindapasirt, T. Huanjit, C. Tang, T. Sato, (2013), Cement mortars hybridized with zeolite and zeolite-like materials made of lignite bottom ash for heavy metal encapsulation, *Journal of Cleaner Production*, 41, 31-41.
- 16) S. Boonjaeng, P. Chindapasirt, K. Pimraksa*, (2014), Lime-calcined clay materials with alkaline activation: Phase development and reaction transition zone, *Applied Clay Science*, 95, 357-364.

*Corresponding author

International Conference

- 1) K. Pimraksa, A. Thongchai, (2006), Strength Enhancement of Mae Moh Waste Gypsum in Lime-Fly Ash Soil Stabilization. Proceeding of 1th International Conference on Pozzolan, Concrete and Geopolymer, Khon Khaen, Thailand.
- 2) A. Thongchai, K. Pimraksa, (2007), The uses of waste gypsum in stabilizing wet soft soils, Proceeding of the 2nd International Geo-Changsha Conference, China.
- 3) C. Hansapinyo, K. Pimraksa, T. Pokaratsiri, C. Kasemset, (2007), Microscopic Investigation on the effect of gypsum in CSH crystallization of autoclaved aerated concrete, Proceeding of the 1st International Conference on Modern Design, Construction and Maintenance of Structures, Vietnam.
- 4) K. Pimraksa, T. Chareerat, P. Chindapasirt, N. Mishima, S. Hatanaka, (2008), Composition and microstructure of fly ash geopolymer containing metakaolin, Proceeding of the International Conference Excellence in Concrete Construction Through Innovation, London, UK.
- 5) K. Pimraksa, K. Boonserm, T. Lertkositpong, T. Sato, (2011), Plaster materials from flue-gas desulfurized gypsum containing chemicals, organic fibers and inorganic additives, Symposium on Advanced Composite Materials, Sendai, Japan.

- 6) A. Kongkoon, P. Chindapasirt, K. Pimraksa, (2012), Study on pozzolanic reaction of Lampang diatomaceous earth in presences of chemical activators, Proceeding of the 5th Asian Concrete Federation International Conference, Chonburi, Thailand.
- 7) T. Chareerat, K. Pimraksa, S. Hatanaka, P. Chindapasirt, (2012), Sulfate and sulfuric resistance of fly ash geopolymer, Proceeding of the Research, Development, and Practice in Structural Engineering and Construction in the ASEA-SEC Conference, Australia.
- 8) K. Pimraksa, A. Kongkoon, A. Rungchet, P. Chindapasirt, (2013), Uses of natural fibers and combustion by-products to produce lightweight building materials, Proceeding of the Asian Conference on Civil, Material and Environmental Sciences, Japan.