

# BHUWADOL WANTHANACHAISAEANG

bhuwadol@yahoo.com

---

## PERSONAL

Gender: Male

Nationality: Thai

---

## EDUCATION

**Bachelor Degree of Geology** 1994 - 1997

Department of Geology, Faculty of Science,  
Chulalongkorn University, Thailand

**Master Degree of Geology** 1997 - 2000

Department of Geology, Faculty of Science,  
Chulalongkorn University, Thailand

**Graduated Gemologist Course (GIA)** 2001

**Doctor rerum Naturalium (Doctor of Natural Science)** 2004 - 2007

Faculty of Chemistry, Pharmacy, and Earth Science,  
University of Mainz, Germany

---

## WORK EXPERIENCE

**Department of Material Science, Faculty of Science,  
Burapha University** 1998 - 2004

Lecturer

Teaching: Physical Geology, Crystallography, Mineralogy, Optical Mineralogy

**Faculty of Gems, Burapha University, Chanthaburi Campus** 2007 - 2016

Lecturer

Teaching: Physical Geology, Mineralogy, Introduction to Gemstone,  
Gemstone Deposit, Physics for Gems, Advance Instrument,  
Gem Identification

**Division of Material Science (Gem and Jewelry),** 2016 - Present

**Department of General Science**

**Faculty of Science, Srinakharinwirot University**

Lecturer: Gem Identification

**Institut für Mineralogie und Kristallographie,** 10/2015

**University of Vienna, Austria**

Guest Professor: Gemmology

---

## SKILLS / INTERESTS

**Languages:** Native Thai, fluent English, intermediate German, beginners Chinese.

**Computer:** Origin, Peakfit, Surfer

**Interests:** Computer, Gems, Travelling.

---

## PUBLICATIONS

**Wanthanachaisaeng, B.,** Saejoo, S., and Termpromraj, I., 2003. The comparative study on colour grading system of blue sapphire based on Munsell colour system. Geo- and Material-Science on Gem-Minerals of Vietnam, *Proceedings of the International Workshop, Hanoi*, October 01 - 08. pp. 195-199.

- Wanthanachaisaeng, B.**, Häger, T., Hofmeister, W., 2005. Determination of pressure around inclusions in corundum crystals by the shift of Cr<sup>3+</sup> luminescence bands. *Gem-Materials and Modern Analytical Methods, Proceedings of the International Symposium, Hanoi*, September 26 – October 2.
- Wanthanachaisaeng, B.** and Häger, T., 2006. Raman spectroscopic study of metamict zircon inclusions in corundum and their behavior on heat treatment. *Proceedings of the 1<sup>st</sup> International gem and Jewelry Conference*, December 6-9, Bangkok and Chanthaburi, Thailand. pp. 52.
- Wanthanachaisaeng, B.** and Häger, T., 2006. Pressure determination around metamict zircon inclusions in corundum and their behavior on heat treatment. *Proceedings of the 1<sup>st</sup> International gem and Jewelry Conference*, December 6-9, Bangkok and Chanthaburi, Thailand. pp. 75.
- Wanthanachaisaeng, B.** and Häger, T., 2006. Pressure-mapping around inclusions in corundum crystals determined by the shift of Cr<sup>3+</sup> luminescence bands. *AOGS 2006*, Singapore. pp. 901/1202.
- Wanthanachaisaeng, B.**, Häger, T., Hofmeister, W., and Nasdala, L., 2006. Raman- und fluoreszenz-spektroskopische Eigenschaften von Zirkon-Einschlüssen in chromhaltigen Korunden aus Ilakaka und deren Veränderung durch Hitzebehandlung. *Zeitschrift der Deutschen Gemmologischen Gesellschaft*, Vol. 55, pp. 123-136.
- Vácz, T., Nasdala, L., Wirth, R., **Wanthanachaisaeng, B.**, and Häger, T., 2007. Potential problems in the annealing of zircon. *Goldschmidt Conference Abstracts*, pp. A1049.
- Nasdala, L., Ruschel, K., Miletich, R., Hanchar, J.M., **Wanthanachaisaeng, B.**, and Häger, T., 2007. Spectral changes of zircon at elevated pressure. *Mitt. Österr. Miner. Ges.* Vol. 153.
- Wanthanachaisaeng, B.** and Häger, T., Crystallinity and phase change of zircon inclusions in corundum from Ilakaka, Madagascar caused by heat treatment. *AOGS 2007*, Bangkok, Thailand.
- Wathanakul, P., **Wanthanachaisaeng, B.**, Häger, T., and Wongkokua, W., 2007. LA-ICP-MS and photoluminescence study of Be heat-treated Songea corundum. *German-Thai Symposium-Nanooscience and Nanotechnology*, Kasetsart University.
- Wanthanachaisaeng, B.**, Häger, T., Hofmeister, W., 2008. Detection of heat treatment in rubies and sapphires from Ilakaka. *Proceedings of the 2nd International Gem and Jewelry Conference. GIT 2008*, Bangkok and Kanchanaburi, Thailand, pp. 86.
- Wanthanachaisaeng, B.**, Bunnag, N., Sutthirat, C., Papawarin, O., and Pisutha-Arnond, V., 2008. Metamictization of zircon in corundum-bearing basalt in Bangkoka, Chanthaburi, Thailand. *Proceedings of the 2nd International Gem and Jewelry Conference. GIT 2008*, Bangkok and Kanchanaburi, Thailand, pp. 106.
- Wanthanachaisaeng, B.**, Bunnag, N., Pattarawarin, P., Ounorn, P., Sutthirat, C., and Pisutha-Arnond, V., 2010. Annealing of metamict zircon from Ratnapura, Sri Lanka. *20<sup>th</sup> General Meeting of the International Mineralogical Association (IMA2010)*, Budapest.
- Wanthanachaisaeng, B.**, Bunnag, N., Sutthirat, C., Atichat, W., Ounorn, P., Sripoonjan, T., and Chanmuang, C., 2012. Influence of Be to phase change on the melted surface of high temperature-heated sapphire. *The 3<sup>rd</sup> International Gem and Jewelry Conference (GIT 2012)*, 12-16 December 2012.
- Pinitpol, N., Bunnag, N., **Wanthanachaisaeng, B.**, 2012. Copal clarity and transparency enhancement., *The 3<sup>rd</sup> International Gem and Jewelry Conference (GIT 2012)*, 12-16 December 2012.
- Wanthanachaisaeng, B.**, Bunna, N., Sutthirat, C., Ounorn, P., Pisutha-Arnond, V., 2012. Characteristics of green zircon from Ratnapura, Sri Lanka. *12<sup>th</sup> Regional Congress on Geology, Mineral and Energy Resources of Southeast Asia (GEOSEA 2012): Geoscience in Response to the Changing Earth*, pp. 25-29.

- Wanthachaisaeng, B.**, Bunnag, N., Sutthirat, C., Atichat, W., Ounorn, P., Sripoonjan, T., Lenz, C. and Nasdala, L., 2013. Investigation of Be-treated sapphire by luminescence spectroscopy. *Conference on Raman and Luminescence Spectroscopy in the Earth Sciences (CORALS-2013)*. Vienna, pp. 109-110.
- Wittwer, A., Nasdala, L., **Wanthachaisaeng, B.**, Bunnag, N., Skoda, R., Balmer, W.A., Giester, G., Zeug, M., 2013. Mineralogical characterization of gem zircon from Ratanakiri, Cambodia. *Conference on Raman and Luminescence Spectroscopy in the Earth Sciences (CORALS-2013)*. 3-5 July 2013, Vienna, pp.115-116.
- Sripoonjan, T., Pisutha-Arnond, V., Atichat, W., **Wanthachaisaeng, B.**, and Sutthirat, C., 2013. A new heat treatment of opaque sapphire from basaltic deposit in Chanthaburi, Eastern Thailand. *Annual Meeting Asia Oceania Geosciences Society*, 24-28 June 2013, Brisbane.
- Satitkune, S., **Wanthachaisaeng, B.**, Won-in, K., Wongkokau, W., Chantararat, P., Leelawattanasuk, T., and Wathanakul, P., 2014. Heat treatment of zircon samples from Kanchanaburi, Thailand and Ratanakiri, Cambodia. *33<sup>rd</sup> International Gemmological Conference (IGC)*. Vietnam. pp. 158-160.
- Sripoonjan, T., **Wanthachaisaeng, B.**, and Sutthirat, C., 2014. A theoretical and experimental study of the heat treatment of opaque Thai sapphire to transparent blue sapphire. *The Australian Gemmologist*, Vol. 25 (6&7), pp.239-244.
- Toaree, S., **Wanthachaisaeng, B.**, and Sutthirat, C., 2015. Microstructure of opal related to gemological characteristics. *The Australian Gemmologist*, Vol. 25 (9), pp. 326-329.
- Nasdala, L., Chanmuang, C., Hager, T., Hofmeister, W., Kennedy, A.K., Reiners, P.W., Vaczi, T., Valley, J.W., **Wanthachaisaeng, B.**, Fuyuan, W., Zeug, M., and Zoysa, E.G., 2015. The scientific importance of gem zircon as analytical reference materials. *34<sup>th</sup> International Gemmological Conference (IGC), Lithuania*. pp. 128-131.
- Bootkul, D., Chaiwai, C., Tippawan, U., **Wanthachaisaeng, B.**, Intarasiri, S., 2015. Analysis and modification of blue sapphires from Rwanda by ion beam techniques. *Nuclear Instruments and Methods in Physics Research B*, in press.