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Appendix**Raw materials as starting reagents used in preparing the samples**

Bi_2O_3	Riedel-deHaen	MW. 465.96
Na_2CO_3	CARLO ERBA	MW. 105.99
TiO_2	CARLO ERBA	MW. 79.899
PbO	J.T. Baker	MW. 223.19
BaCO_3	J.T Baker	MW. 197.34

Biography

Miss Kedsarin Pimraksa was born on the 22nd of August in 1973. She was born in Chiang Rai, the northeast of Thailand. In 1995 she attained a Bachelor Degree in Industrial Chemistry from Faculty of Science, Chiang Mai University. She began a further study in Master Degree in the field of Ceramic Technology at Chulalongkorn University in June 1995 and completed all of programmes in October 1997.