

## A preview study on UWB imaging system to detect early breast tumor

*A.Naveena Lakshmi<sup>a</sup>; S. Khatun<sup>a</sup>; S. A. AlShehri<sup>b</sup>*

<sup>a</sup>Faculty of Computer Systems and Software Engineering University Malaysia Pahang  
(UMP) Kuantan Malaysia

<sup>bb</sup>Department of Computer and Communication Systems Engineering Faculty of  
Engineering Universiti Putra Malaysia Serdang Malaysia

### **ABSTRACT**

Breast cancer is the second leading cause of cancer death after lung cancer among the women. In this paper we reviewed some breast cancer detection techniques like Mammography, Magnetic Resonance Imaging (MRI), ultra Sound and Ultra Wide Band (UWB) and its performances. Current UWB systems having some limitations including they are not able to detect the tumor at early stages, a multiple antenna array in terms of complex system and in all systems no pictorial 3D representation of tumor size. To overcome this limitation, a thorough investigation is done here, to find out the limitations of existing and proposed systems followed by the open issues which need to be resolved.

### **KEYWORDS:**

Ultra Wide band; Breast Cancer; Tumor Detection

## REFERENCES

1. Globocan 2002: Cancer Incidence, Mortality and Prevalence Worldwide. IARC Cancer Base No. 5. version 2.0. IARC Press, Lyon (2004)
2. Gail, M.H., Brinton, L.A., Byar, D.P.: Projecting individualized probabilities of developing breast cancer for white females who are being examined annually. *J Natl. Cancer Inst.* 81, 1879–1886 (1989)
3. Seidman, H., Stellman, S.D., Mushinski, M.H.: A different perspective on breast cancer risk factors: some implications of the non attributable risk. *CA Cancer J. Clin.* 32, 301–313 (1982)
4. Jemal, A., Siegel, R., Ward, E., Hao, Y., Xu, J., Murray, T., Thun, M.J.: Cancer Statistics. *CA Cancer J. Clin.* 58, 71–96 (2008)
5. Breast Health Information Center, <http://www.radiologymalaysia.org/breasthealth/about/FactsNStats.html>