Bibliography


[18] Y. Yang, “Microchip Wireless Media Access Controller (MiMAC) - Application Note,” Microchip Technology Inc.


[25] M. Haneef and Z. Deng, “Comparative analysis of classical routing protocol (LEACH) and its updated variants that improved network life time by addressing


[54] Electromagnetic compatibility and Radio spectrum Matters (ERM); Wideband transmission systems; Data transmission equipment operating in the 2,4 GHz ISM


Appendix A

Conference Contributions


Appendix B

Sensor Node Design Schematics
R6 is shorted and the NTC is not connected.

The temperature control circuit is available on the PCB, however it is not implemented.

Charge current = 212.77mA
Rprog = 4.7K
Charge current = 1A
Rprog = 1K
Appendix C

Sensor Node Connection Diagram
Figure C.1: Sensor Node Connection Diagram
Appendix D

Shortest Hop Path and MTTP Experiment Data
Figure D.1: A 3D Contour Plot of the Node Energy Consumption (J) of the Shortest Hop Path Routing Scheme (Experiment 1) Versus the Node Deployment (x,y)
Figure D.2: A 3D Contour Plot of the Node Energy Consumption (J) of the Shortest Hop Path Routing Scheme (Experiment 2) Versus the Node Deployment (x,y)
Figure D.3: A 3D Contour Plot of the Node Energy Consumption (J) of the Shortest Hop Path Routing Scheme (Experiment 3) Versus the Node Deployment (x,y)
Figure D.4: A 3D Contour Plot of the Node Energy Consumption (J) of the MTTPR Scheme (Experiment 1) Versus the Node Deployment (x,y)
Figure D.5: A 3D Contour Plot of the Node Energy Consumption (J) of the MTTPR Scheme (Experiment 2) Versus the Node Deployment (x,y)
Figure D.6: A 3D Contour Plot of the Node Energy Consumption (J) of the MTTPR Scheme (Experiment 3) Versus the Node Deployment (x,y)
Appendix E

Statistical Consultation Service Letter
Re: Verhandeling Mnr J.G.J Krige, studentenommer 21158682

Hiermee word bevestig dat Statistiese Konsultasiediens die data verwerk het en ook betrokke was by die interprestasie van die resultate.

Vriendelike groete

[Signature]

Prof. H.S. Steyn (Pr. Sci. Nat.)
Statistiese Konsulent