

Dissolved Gas Analysis of Insulating Transformer Oil Using Optical Fiber

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Thesis submitted to the faculty of the Virginia Polytechnic Institute and State University in  
partial fulfillment of the requirements for the degree of

Master of Science  
in  
Electrical Engineering

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Description of item under review for fair use: Figure 2-1. Thermal lens effect experiment schematic. Source: Electric Power Research Institute, "Novel Sensor for Transformer Diagnosis," Product ID: 1024193, 2012

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Description of item under review for fair use: Figure 3-1. Infrared absorption of hydrogen when diffused in silica fiber Source: Mochizuki, K., et al., Behavior of hydrogen molecules adsorbed on silica in optical fibers. Quantum Areas in Communications, IEEE Journal on, 1984. 2(6): p 842-847

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Description of item under review for fair use: Table 3-1 Fiber Loss at Possible Absorption Lines for Different Hydrogen Concentration Source:Dong, Bo, "Fiber Optic Sensors for On-line, Real Time Power Transformer Health Monitoring," Ph.D. dissertation, Dept. of Electrical and Computer Engineering, Virginia Polytechnic Institute and State University, Blacksburg VA, 2012

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