VARIABLE FREQUENCY MICROWAVE CURING OF POLYURETHANE

Diane C. Folz

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
Materials Science and Engineering

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Keywords: microwave processing, FTIR spectroscopy, attenuated total reflectance, cure rate, polymer coatings, wood coatings

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Figure 3.6: Photograph of the Avatar 330 Smart SpecuLATR - ZnSe HATR crystal used to perform HATR-FTIR measurements

and

Figure 3.7: Perkin Elmer FTIR specular reflectance stage with manual adjustments required for focusing the IR beam, circa 1970s.