

Technical Letter

An Attempt of pH Mapping on Biological Specimens by pH-Imaging Microscope Using a Semiconductor Silicon Sensor

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An attempt of pH mapping of biological samples was made on the whole body sections of fresh frozen rats by means of the pH-imaging microscope using a semiconductor silicon sensor. Fine tuning of experimental conditions for data acquisition and its digital processing successfully yielded pH images at the tissue and organ levels. Present data suggest usefulness of the application of the pH-imaging microscope for the analysis of local pH values of animal tissues that have a potential importance in regulation of biological activities.

Keywords : pH; pH-imaging; frozen section; rat; histology.

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