

Resistivity logging using focused laterolog and induction tools started to replace unfocused normal and lateral tools in the early 1950s. One attractive feature of these technologies was the apparent ease of estimating R_{TRUE} when compared to the prior devices. In 1957, Martin, Tixier, and Dumanoir¹ claimed, with some caveats, that $R_{APPARENT}$ from induction logs in the Gulf of Mexico “can be used without correction” for R_{TRUE} . Those working in low-resistivity pay and thin beds had reason to doubt this statement, but had no means to engage in quantitative discussion.

Resistivity logging instruments were, and still are, under-characterized because of the difficulty in studying their responses. However, thanks to *Moore’s Law*, by the late '70s it was possible to numerically model non-trivial scenarios: service companies and many oil company research labs began to include modeling of resistivity tool responses in their formation evaluation.

In the mid-1990s, two events gave rise to what became the **Resistivity Modeling SIG**: first was the commercialization of a graphical user interface for resistivity modeling developed by an oil company; second was the formation of the LCC. SIGs for LWD and the AIT were founded early on, and these had much in common with the **Resistivity Modeling SIG**; for characterizing LWD and AIT responses, modeling is really the only option. Once this was recognized, the LWD and AIT SIGs merged with the **Resistivity Modeling SIG**, which continues to address the spectrum of original interests.

The **Resistivity Modeling SIG** has met two, occasionally three, times per year since 1994. Members come from service and oil companies, consulting organizations and academia, and membership is open to all interested individuals. In addition to presentations given at each meeting, the SIG takes on special projects: Notable accomplishments are two compilations by L. C. Shen – [*Comparison of modeling codes for resistivity and MWD instruments - Part 1, 1-D radial invasion*](#)² and [*Part 2, 1-D thin beds*](#)³ – as well as the compilation by Q. Zhou of an *Updated Survey of MWD Resistivity Tools*⁴.

1 Petroleum Technology, **IX** 7, 1957

2 Petrophysics, **41** 3, 2000

3 Petrophysics, **43** 1, 2002

4 SIG Technical Note, 2004