INTRODUCTION

Outcrop provides an unparalleled opportunity to examine bedrock in situ and gain valuable insights into geological history. Accurate description, mapping, and sampling of outcrops make possible all of the geologic sciences, and are especially important in reservoir analysis.

Unfortunately, outcrops do not cover the majority of the Earth’s land surface, and where rocks do crop out, their locations can be difficult and dangerous to reach.

With this in mind, an ad hoc committee came together as a subset of the AAPG 100th Anniversary Committee to produce a volume of highly selective guides to outcrop that change the way petroleum geology is practiced.

Initially, the volume was conceived as a conventional printed publication, but the introduction and use of virtual outcrops in geological studies and the fundamental change this has made in the potential for geological mapping and analysis over large and often remote areas was a catalyst to developing a bespoke digital format.

The focus of the ad hoc group shifted to an all-digital format; one that would be immersive and interactive with the goal of delivering in-depth learning opportunities for geoscientists that can be experienced in office and laboratory settings via desktop access and in the field via tablet access.

A new publishing platform has been developed in partnership with VWORLD, a French software development company. The first volume published on this new platform will be the Outcrops that Change the Way We Practice Petroleum Geology, edited by A. Hurst, J. Kenter, and S. Graham.

Included in the volume are eight thematic chapters, each of which will contain a number of outcrop excursions: Source Rocks/Unconventionals, Seals, Siliciclastic Reservoirs, Carbonate Reservoirs, Migration, Structural Traps, Plays, and Unusual Reservoirs and Traps.

The launch of the volume coincides with AAPG’s Annual Convention & Exhibition held in Houston, April 2017, as a celebration of AAPG’s 100th Anniversary. The first 10 outcrop excursions are currently available on the new publishing platform, with many more to come in future months.

Twenty-three of the outcrop excursions have been summarized by the authors and are contained in this April 2017 issue of the AAPG Bulletin as a preview of the full publication, which will eventually contain 40–50 field trips.