

*Note on the Identity of Paralaurionite and Rafaelite.*

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PARALAURIONITE from Laurium was described by the author in the last number of this Magazine,<sup>1</sup> published early in April of this year, and was so called on account of its chemical composition being, as was shown by Mr. G. T. Prior, the same as that of Laurionite. Shortly after, in the number of Groth's *Zeitschrift* published on May 30th, appeared a posthumous paper<sup>2</sup> on new minerals from Chili by the late Professor Arzruni in which was described a new oxychloride of lead, Rafaelite. A comparison of the mean values of the measured angles leaves no doubt as to the identity of the two minerals. The mode of twinning and the optical characters are also the same. The only difference is one of colour: Paralaurionite is white, whereas Rafaelite is violet-red, and shows strong pleochroism. Sufficient material of the latter mineral was not available for quantitative analysis

The following table compares the means of the measured angles:—

PARALAURIONITE.		RAFAELITE.	
	Observed mean.		Observed mean.
100 : 001	62°47'	100 : 001	62°47'
$\bar{1}00 : \bar{1}01$	77 0	$\bar{1}00 : \bar{1}02$	76 46
$\bar{1}00 : \bar{2}01$	45 24	$\bar{1}00 : \bar{1}01$	45 30
$\bar{1}00 : \bar{4}01$	21 34	$\bar{1}00 : \bar{2}01$	21 57
$\bar{1}00 : \bar{6}01$	13 53	$\bar{1}00 : \bar{3}01$	14 7
100 : 110	67 25	100 : 130	67 28
100 : 111	58 28	100 : 132	58 32
001 : 111	52 39	001 : 132	52 40
001 : 110	79 55	001 : 130	79 55

In addition to these the following forms were found on Rafaelite:—( $\bar{1}03$ ), ( $\bar{1}01$ ), ( $\bar{2}01$ ), ( $\bar{1}10$ ), ( $\bar{0}10$ ), ( $\bar{4}32$ ). The form ( $\bar{1}11$ ) of Paralaurionite is ( $\bar{1}32$ ) of Rafaelite.

<sup>1</sup> 1899, XII, 108. The axial ratios are there incorrectly stated. They should be  $a : b : c = 2.7036 : 1 : 1.8019$ .

<sup>2</sup> *Zeits. Kryst. Min.* 1899, XXXI, 229.