between the glass and coesite forms of BeF_2. The *Rm* for the cristobalite and quartz forms respectively of BPO_4, $BAsO_4$, $AlPO_4$, $AlAsO_4$ also are approximately within 3 per cent of each other. A decrease of the

Table 2. *Comparison of molar refractivities*

Compound	Form	Density	Average* refractive index	$\frac{Rm^{**}}{(A \cdot B)\,X_2}$	Per cent*** difference
SiO_2	glass	2.203	1.458	7.45	+ 3.6
SiO_2	*l*-crist.	2.325	1.486	7.42	
SiO_2	*l*-trid.	2.262	1.470	7.41	
SiO_2	quartz	2.648	1.548	7.19	
SiO_2	coesite	2.90	1.598	7.06	— 1.8
BeF_2	glass	1.986	1.275	4.07	+ 1.7
BeF_2	quartz	2.38	1.328	4.00	
BeF_2	coesite	2.55	1.345	3.93	— 1.7
BPO_4	crist.	2.80	1.597	6.41	+ 2.6
BPO_4	quartz	3.07	1.642	6.24	
$BAsO_4$	crist.	3.64	1.682	7.75	+ 3.5
$BAsO_4$	quartz	4.00	1.738	7.49	
$AlPO_4$	crist.	2.285	1.465	7.36	+ 3.4
$AlPO_4$	quartz	2.62	1.526	7.12	
$GaPO_4$	crist.	3.27	1.560	8.15	+ 2.5
$GaPO_4$	quartz	3.54	1.603	7.95	
$MnPO_4$	crist.	2.87	1.482	7.56	+ 4.7
$MnPO_4$	quartz	3.20	1.528	7.22	
GeO_2	glass	3.628	1.6081	9.90	+ 2.8
GeO_2	quartz	4.228	1.707	9.63	
	rutile	6.239	2.015	8.46	—12.2

Abbreviations: crist. = cristobalite, trid. = tridymite.

* Average refractive index calculated as $\sqrt[3]{N_3^2 N_e}$. The comparative values of *Rm*, in general, are not sensitive to manner of calculating the average refractive index.

** $\frac{Rm}{(A \cdot B)\,X_2}$ equals the *Rm* of AX_2 or 1/2 of ABX_4 compounds. *Rm* normally reported in cm^3 per mole.

*** Percentage difference relative to the *Rm* value of the quartz polymorph of each series.