

Register list for 7 new names including *Sigynarchaeum* gen. nov.

Submitted by Xie, Ruize

Table 1: Complete list of names proposed in the current register list.

Proposed Taxon	Etymology	Description	Parent Taxon	Type	Registry URL
Order <i>Sigyniarchaeales</i>	[Si.gy.ni.ar.chae.a'les] N.L. neut. n. <i>Sigyniarchaeum</i> , referring to the type genus <i>Sigyniarchaeum</i> ; -ales, ending to denote an order; N.L. fem. pl. n. <i>Sigyniarchaeales</i> , the <i>Sigyniarchaeum</i> order	The order is described based on 37 concatenated conserved marker genes phylogeny. The description is the same as that of its sole genus and species. Type genus is <i>Sigynarchaeum</i> .	<i>Lokiarchaeia</i>	<i>Sigyniarchaeum</i>	seqco.de/i:44774
Family <i>Freyriarchaeaceae</i>	[Frey.ri.ar.chae.a'ce.ae] N.L. neut. n. <i>Freyriarchaeum</i> , referring to the type genus <i>Freyriarchaeum</i> ; -aceae, ending to denote a family; N.L. fem. pl. n. <i>Freyriarchaeaceae</i> , the <i>Freyriarchaeum</i> family	The family is described based on 37 concatenated conserved marker genes phylogeny. The description is the same as that of its sole genus and species. Type genus is <i>Freyrarchaeum</i> .	<i>Jordiarchaeales</i>	<i>Freyriarchaeum</i>	seqco.de/i:44789
Family <i>Sigyniarchaeaceae</i>	[Si.gy.ni.ar.chae.a'ce.ae] N.L. neut. n. <i>Sigyniarchaeum</i> , referring to the type genus <i>Sigyniarchaeum</i> ; -aceae, ending to denote a family; N.L. fem. pl. n. <i>Sigyniarchaeaceae</i> , the <i>Sigyniarchaeum</i> family	The family is described based on 37 concatenated conserved marker genes phylogeny. The description is the same as that of its sole genus and species. Type genus is <i>Sigynarchaeum</i> .	<i>Sigyniarchaeales</i>	<i>Sigyniarchaeum</i>	seqco.de/i:44816
Genus <i>Freyriarchaeum</i>	[Frey.ri.ar.chae'um] N.L. neut. n. <i>archaeum</i> , archaeon; N.L. neut. n. <i>Freyriarchaeum</i> , an archaeon named after Freyr, the god of peace in Norse mythology	A genus established on the basis of GTDBTK analyses, AAI, and phylogenomic analyses. It is classified as a member of the <i>Freyrarchaeaceae</i> family. The type species of the genus is <i>Freyrarchaeum guaymaensis</i> .	<i>Freyriarchaeaceae</i>	<i>Freyriarchaeum guaymasense</i> ^{Ts}	seqco.de/i:44790
Genus <i>Sigyniarchaeum</i>	[Si.gy.ni.ar.chae'um] N.L. neut. n. <i>archaeum</i> , archaeon; N.L. neut. n. <i>Sigyniarchaeum</i> , an archaeon named after Sigyn, the god of victory in North mythology		<i>Sigyniarchaeaceae</i>	<i>Sigyniarchaeum tengchongense</i> ^{Ts}	seqco.de/i:44819

Proposed Taxon	Etymology	Description	Parent Taxon	Type	Registry URL
Species <i>Freyriarchaeum</i> <i>guaymasense</i> ^{Ts}	[guay.mas.en'se] N.L. neut. adj. <i>guaymasense</i> , pertaining to Guaymas Basin, located in the Gulf of California, México	This uncultured lineage is represented by the genome “GB_128” consisting of 3.8 Mbps in 131 contigs with an estimated completeness of 97.2%, an estimated contamination of 4.21% and 20 tRNAs The MAG recovered from Guaymas Basin sediment.	<i>Freyriarchaeum</i>	NCBI Assembly: GCA_030587405.2 ^{Ts}	seqco.de/i:44791
Species <i>Sigyniarchaeum</i> <i>tengchongense</i> ^{Ts}	[ten.gchon.gen'se] N.L. neut. adj. <i>tengchongense</i> , pertaining to Tengchong, Yunnan province in southwest China	This uncultured lineage is represented by the genome “SQRJ_234” consisting of 5.9 Mbps in 269 contigs with an estimated completeness of 91.59%, an estimated contamination of 4.67% and 21 tRNAs The MAG recovered from hot spring sediment.	<i>Sigyniarchaeum</i>	NCBI Assembly: GCA_030587475.2 ^{Ts}	seqco.de/i:44839